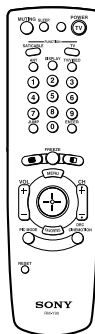


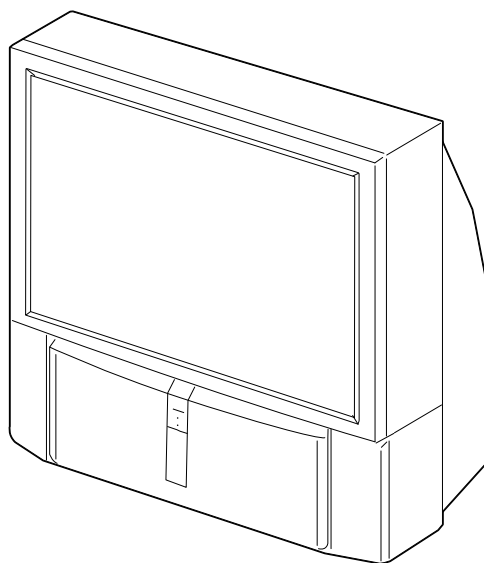
SERVICE MANUAL

RA-6 CHASSIS

| <u>MODEL</u> | <u>COMMANDER</u> | <u>DEST.</u> | <u>CHASSIS NO.</u> | <u>MODEL</u> | <u>COMMANDER</u> | <u>DEST.</u> | <u>CHASSIS NO.</u> |
|--------------|------------------|--------------|--------------------|--------------|------------------|--------------|--------------------|
| KP-43HT20 | RM-Y908 | US | SCC-P65C-A | KP-53HS30 | RM-Y908 | US | SCC-P65A-A |
| KP-43HT20 | RM-Y908 | Canadian | SCC-P65C-A | KP-53HS30 | RM-Y908 | Canadian | SCC-P65A-A |
| KP-53HS20 | RM-Y908 | US | SCC-P65D-A | KP-61HS20 | RM-Y908 | US | SCC-P65E-A |
| KP-53HS20 | RM-Y908 | Canadian | SCC-P65D-A | KP-61HS20 | RM-Y908 | Canadian | SCC-P65E-A |
| | | | | KP-61HS30 | RM-Y908 | US | SCC-P65B-A |
| | | | | KP-61HS30 | RM-Y908 | Canadian | SCC-P65B-A |



RM-Y908



KP-43HT20/53HS20/53HS30/61HS20/61HS30

COLOR REAR VIDEO PROJECTOR
SONY®

SAFETY CHECK-OUT (US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

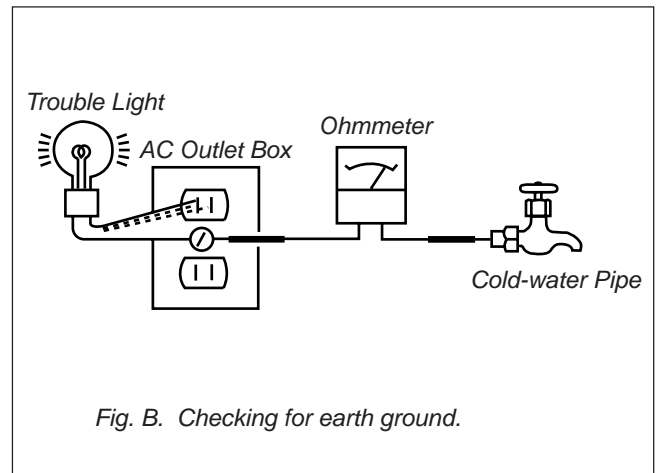
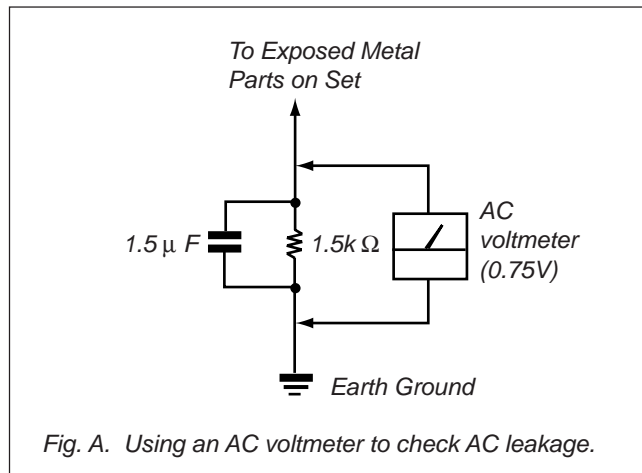
LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)



(CAUTION)

☞ THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

☞ CES INSTRUCTIONS DE SERVICE SONT À L'USAGE DU PERSONNEL DE SERVICE QUALIFIÉ SEULEMENT. POUR PRÉVENIR LE RISQUE DE CHOC ÉLECTRIQUE, NE PAS FAIRE L'ENTRETIEN AUTRE QUE CELUI CONTENU DANS LE MODE D'EMPLOI À MOINS QUE VOUS SOYEZ QUALIFIÉ FAIRE AINSI.

ATTENTION!!

AFIN D'ÉVITER TOUT RISQUE DELECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ÊTRE UTILISÉ LORS DE TOUT DÉPANNAGE.

LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

TABLE OF CONTENTS

| Section | Title | Page | Section | Title | Page |
|-----------------------------------|---|----------|--------------------------------------|---|-----------|
| 1. SELF DIAGNOSIS FUNCTION | | 5 | 5. SAFETY RELATED ADJUSTMENTS | | |
| 2. DISASSEMBLY | | | 5-1. | HV REGULATION CIRCUIT CHECK AND ADJUSTMENT | 32 |
| 2-1. | REAR BOARD REMOVAL | 8 | 5-2. | HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT | 32 |
| 2-2. | CHASSIS ASSY REMOVAL | 8 | 5-3. | +B MAX VOLTAGE CONFIRMATION | 32 |
| 2-3. | SERVICE POSITION | 8 | 5-4. | +B OVP CONFIRMATION | 32 |
| 2-4. | H2 BOARD REMOVAL | 8 | 6. DIAGRAMS | | |
| 2-5. | H1 BOARD REMOVAL | 9 | 6-1. | BLOCK DIAGRAM (1) | 33 |
| 2-6. | H3 BOARD REMOVAL (KP-43HT20) | 9 | | BLOCK DIAGRAM (2) | 34 |
| 2-7. | H3 BOARD REMOVAL (KP-53HS20/53HS30/61HS20/61HS30) | 9 | | BLOCK DIAGRAM (3) | 35 |
| 2-8. | MIRROR COVER REMOVAL | 9 | | BLOCK DIAGRAM (4) | 36 |
| 2-10. | H4 BOARD AND S BOARD REMOVAL | 10 | | BLOCK DIAGRAM (5) | 37 |
| 2-9. | BEZNET ASSY REMOVAL | 10 | | BLOCK DIAGRAM (6) | 38 |
| 2-12. | G BOARD REMOVAL | 10 | | BLOCK DIAGRAM (7) | 39 |
| 2-11. | AD BOARD AND B BOARD REMOVAL | 10 | | BLOCK DIAGRAM (8) | 40 |
| 2-13. | A BOARD, D BOARD AND U BOARD REMOVAL | 11 | | BLOCK DIAGRAM (9) | 41 |
| 2-14. | PICTURE TUBE REMOVAL | 11 | | BLOCK DIAGRAM (10) | 42 |
| | | | | BLOCK DIAGRAM (11) | 43 |
| 3. SET-UP ADJUSTMENTS | | | 6-2. | CIRCUIT BOARDS LOCATION | 44 |
| 3-2. | SCREEN (G2) ADJUSTMENT (FINE ADJUSTMENT) | 12 | 6-3. | SCHEMATIC DIAGRAMS | 44 |
| 3-1. | SCREEN VOLTAGE ADJUSTMENT (COARSE ADJUSTMENT) | 12 | 6-4. | PRINTED WIRING BOARDS | 73 |
| 3-3. | DEFLECTION YOKE TILT ADJUSTMENT | 12 | 6-5. | WAVEFORMS | 85 |
| 3-4. | FOCUS LENS ADJUSTMENT | 12 | 6-6. | IC BLOCK DIAGRAMS | 87 |
| 3-6. | 2-POLE MAGNET ADJUSTMENT | 13 | 6-7. | SEMICONDUCTORS | 91 |
| 3-5. | FOCUS VR ADJUSTMENT | 13 | 7. EXPLODED VIEWS | | |
| 3-7. | CENTERING MAGNET ADJUSTMENT | 13 | 7-1. | COVER (KP-43HT20) | 92 |
| 3-8. | 4-POLE MAGNET ADJUSTMENT | 13 | 7-2. | COVER (KP-53HS20/HS30/61HS20/HS30) | 93 |
| 3-9. | DEFOCUS ADJUSTMENT (BLUE) | 13 | 7-3. | CHASSIS (KP-43HT20) | 94 |
| 3-10. | ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER | 14 | 7-4. | CHASSIS (KP-53HS20/HS30/61HS20/HS30) | 95 |
| | | | 7-5. | PICTURE TUBE | 96 |
| 4. CIRCUIT ADJUSTMENTS | | | 8. ELECTRICAL PARTS LIST | | 97 |
| 4-1. | P & P SUB CONTRAST ADJUSTMENT (VIDEO) (SCON) | 31 | | | |
| 4-2. | P & P SUB CONTRAST ADJUSTMENT (RF) (SCON) | 31 | | | |
| 4-3. | P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (SHUE, SCOL) | 31 | | | |
| 4-4. | P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (SHUE, SCOL) | 31 | | | |

SECTION 1

SELF DIAGNOSIS FUNCTION

1. Summary of Self-Diagnosis Function

- This device includes a self-diagnosis function.
- In case of abnormalities, the TIMER/STAND BY indicator automatically blinks. It is possible to predict the abnormality location by the number of blinks. The Instruction Manual describes blinking of the TIMER/STAND BY indicator.
- If the symptom is not reproduced sometimes in case of a malfunction, there is recording of whether a malfunction was generated or not. Operate the remote command to confirm the matter on the screen and to predict the location of the abnormality.

2. Diagnosis Items and Prediction of Malfunction Location

- When a malfunction occurs the TIMER/STAND BY indicator only blinks for one of the following diagnosis items. In case of two or more malfunctions, the item which first occurred blinks. If the malfunctions occurred simultaneously, the item with the lower blink count blinks first.
- The screen display displays the results regarding all the diagnosis items listed below. The display “0” means that no malfunctions occurred.

| Diagnosis Item | No. of times TIMER/STANDBY indicator blinks | Probable Cause Location | Detected symptoms |
|---|---|---|--|
| Power does not turn on | 0 | <ul style="list-style-type: none"> Power cord is not plugged in. Fuse is burned out (F6001) (G board) | <ul style="list-style-type: none"> Power does not come on. No power is supplied to the unit. AC power supply is faulty. |
| +B overcurrent (OCP) (See Note 1) | 2 times | <ul style="list-style-type: none"> H. OUT (Q8024) is shorted. (D board) +B PWM (Q8035, 8038) is shorted. (D board) | <ul style="list-style-type: none"> Power does not come on. Load on power line is shorted. |
| +B overvoltage (OVP) | 3 times | <ul style="list-style-type: none"> IC501 is faulty (G board) IC5002 is faulty (G board) | <ul style="list-style-type: none"> Has entered standby mode. |
| Vertical deflection stopped | 4 times | <ul style="list-style-type: none"> +/- 15V is not supplied. (D board) IC8003 is faulty. (A board) | <ul style="list-style-type: none"> Has entered standby state after horizontal raster. Vertical deflection pulse is stopped. Power line is shorted or power supply is stopped. |
| White balance failure (Not balanced) | 5 times | <ul style="list-style-type: none"> Video out (IC7101, 7201, 7301) is faulty. (CR, CG, CB board) CRT drive (IC309) is faulty. (A board) G2 is improperly adjusted. (See Note 2) | <ul style="list-style-type: none"> No raster is generated. CRT cathode current detection reference pulse output is small. |
| LOW B OCP/OVP (Overcurrent/over voltage) (See Note 3) | 6 times | <ul style="list-style-type: none"> +5 line is overloaded. (A, B boards) +5 line is shorted. (A, B boards) | <ul style="list-style-type: none"> No picture No picture |
| Horizontal deflection stopped | 7 times | <ul style="list-style-type: none"> Q8035, 8038 is shorted. (D board) | |
| High voltage error | 8 times | <ul style="list-style-type: none"> T8005 is faulty. (D board) | |
| Audio error | 9 times | <ul style="list-style-type: none"> +/- 19V line is shorted. (A, B boards) IC708 is faulty. (A board) PS701 or PS702 is opened. (A board) | <ul style="list-style-type: none"> No sound |

Note1: If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on screen.

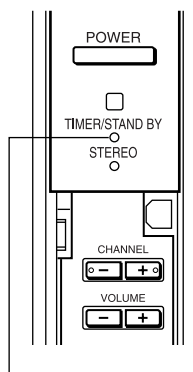
Note 2: Refer to Screen (G2) Adjustment in Section 3-1, 2 of this manual.

Note 3: If TIMER/STANDBY indicator blinks six (6) times, unplug the unit and wait 10 minutes before performing the adjustment.

3. Blinking count display of TIMER/STAND BY indicator

* One blink is not used for self-diagnosis.

< FRONT PANEL >



TIMER/STAND BY indicator

•EXAMPLE

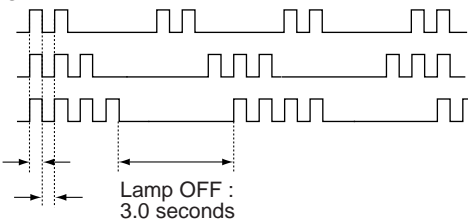
<Diagnosis Items> <Number of Blinks>

- +B overcurrent 2 times
- +B overvoltage 3 times
- Vertical deflection stop 4 times

Lamp ON : 0.3 seconds

Lamp OFF : 0.3 seconds

Lamp OFF :
3.0 seconds



Release of TIMER/STAND BY indicator blinking.

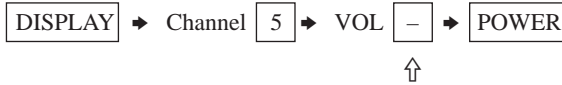
- The TIMER/STAND BY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.

4. Self-diagnosis screen displays

- In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

<Screen Display Method>

- Quickly press the remote command button in the following order from the standby state.



Be aware that this differs from the method of entering the service mode (volume +).

Self-diagnosis screen display

| SELF DIAGNOSIS | | |
|----------------|-----|---|
| 2 : +B OCP | N/A | |
| 3 : +B OVP | N/A | |
| 4 : V STOP | 0 | Numeral "0" means that no fault was detected. |
| 5 : AKB | 1 | |
| 10 : WDT | 24 | Numeral "1" means a fault was detected one time or more |
| | | |

5. Self-Diagnosis Screen Display

- The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to "0".
- If the results display is not returned to "0" it will not be possible to judge a new malfunction after completing repairs.

<Method of Clearing Results Display>

- Power off (Set to the standby mode)
- DISPLAY → Channel 5 → VOL + → POWER (Service Mode)
- Channel 8 → ENTER (Test reset = Factory preset condition)

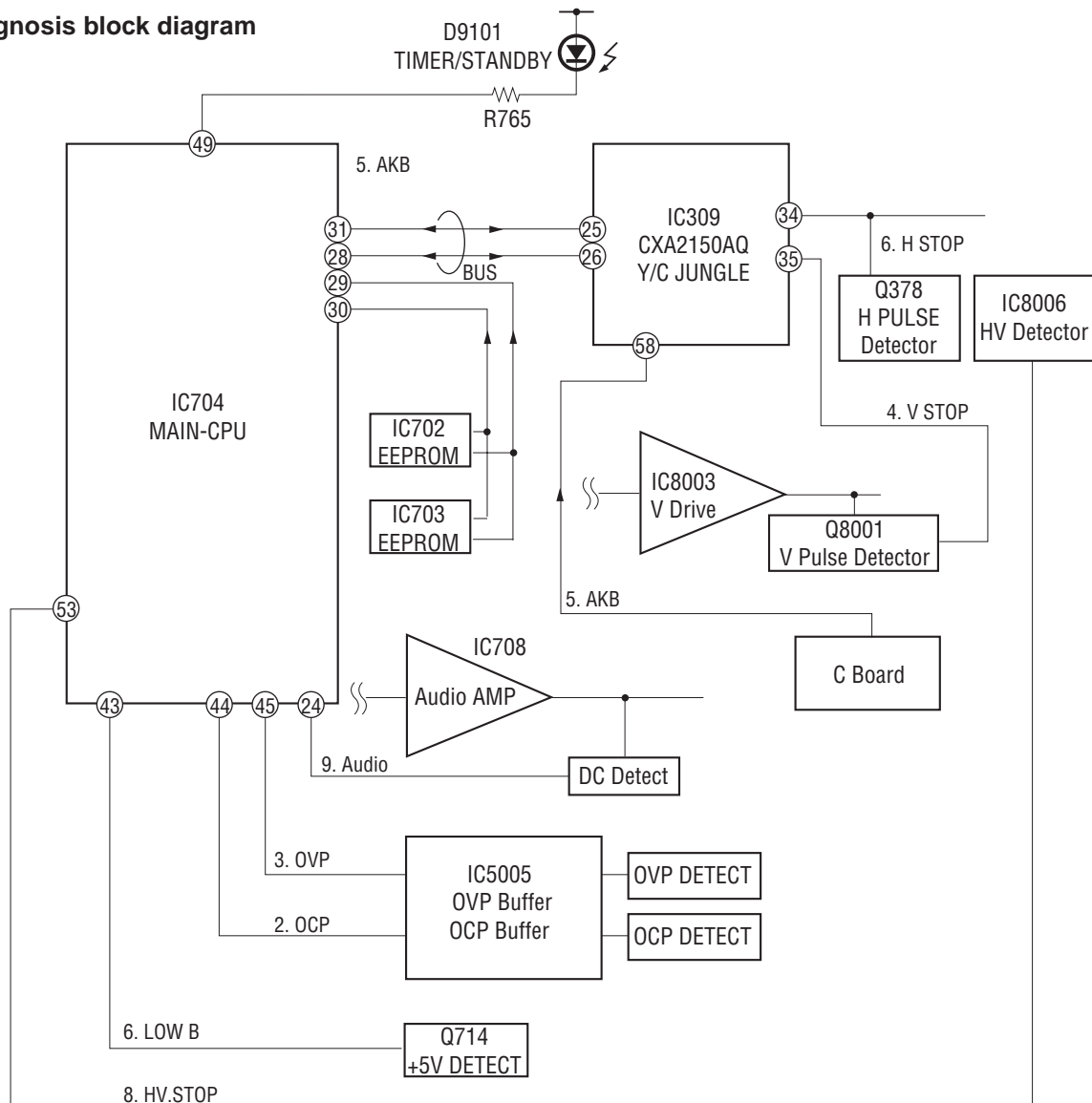
<Method of Ending Self Diagnosis Screen>

- When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

6. Self-diagnosis function operation

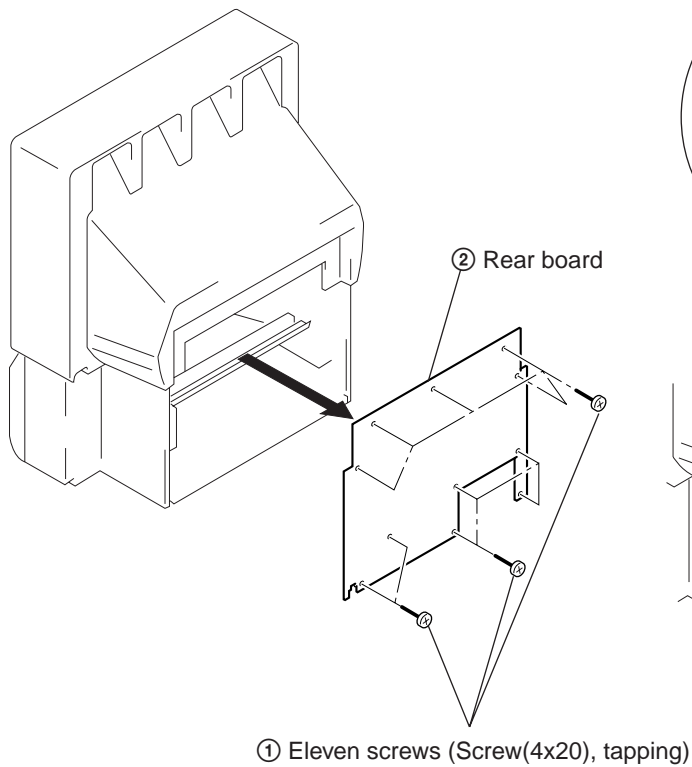
- OCF** Low B and +B line detect DET SHORT, and shut-down POWER ON RELAY.
Reset by turning power on/off.
In case of +B is loaded approx. 1.5A or more, microcomputer detects it via IC5005
- OVP** In case of +B becomes approx. 150V or more, POWER ON RELAY shuts down and microcomputer detects it via IC5005.
Reset by turning power on/off just the same as OCP.
- Low B** Occurs when set +5V is out
- V Stop** In case of V Drive disappeared, Q8001 detects it and shut-down POWER ON RELAY. Microcomputer detects it and makes LED blinking.
- AKB** IK detection. Makes LED blinking in case of microcomputer doesn't detect IK returns of IC309 (CXA2150AQ) 20 seconds or more.
- H Stop** In case of H DRIVE is disappeared, Q378 detects it and shut-down POWER ON RELAY shuts down.
Microcomputer receives H Stop data from Q378 and makes LED blinking.
- HV Stop** In case of HV becomes 33KV or more. IC8006 detects it and shut-down POWER ON RELAY. Microcomputer makes LED blinking.
- Audio** In case of DC component overlaps the output of Audio Amp., POWER ON RELAY shuts down.
Microcomputer detects it and makes LED blinking.

Self-diagnosis block diagram

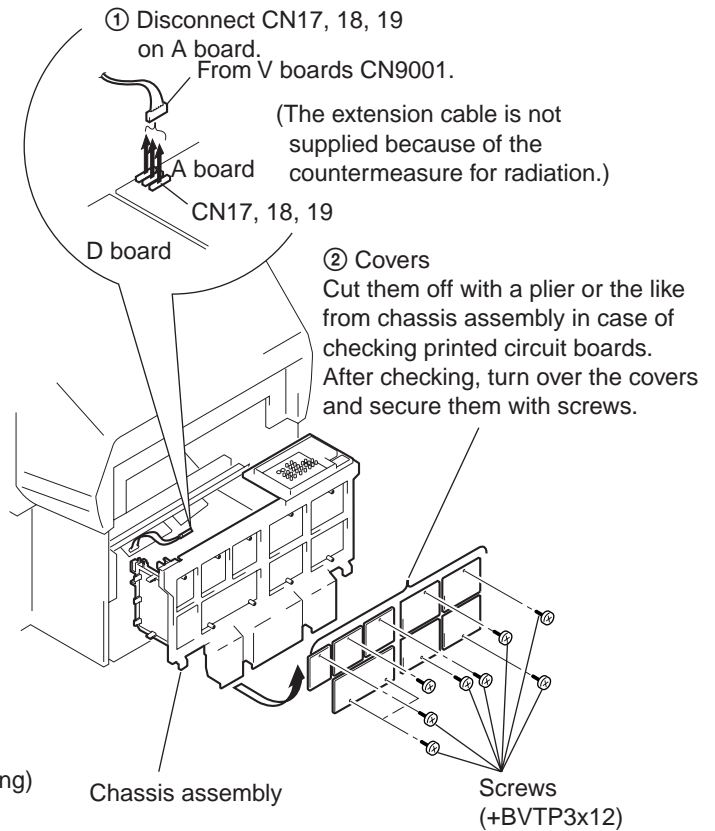


SECTION 2 DISASSEMBLY

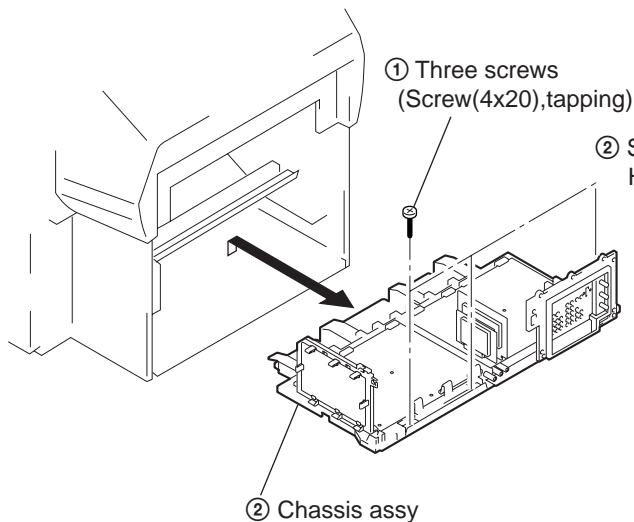
2-1. REAR BOARD REMOVAL



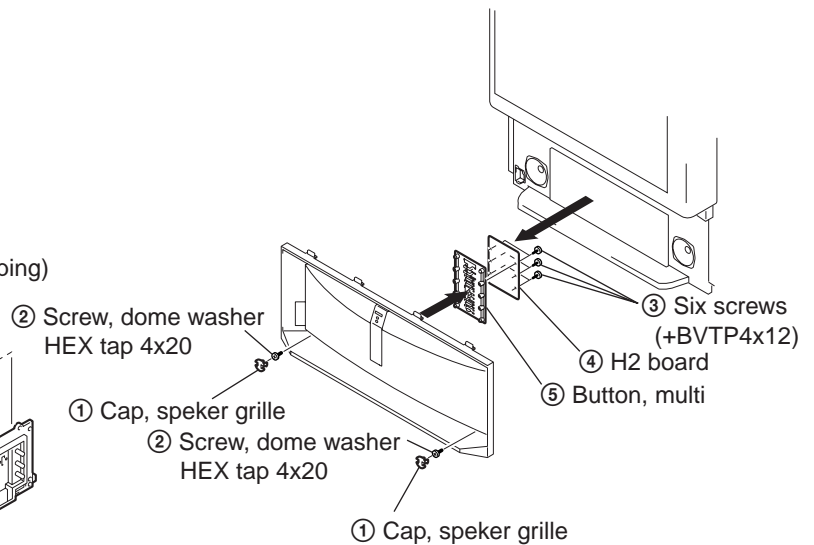
2-3. SERVICE POSITION



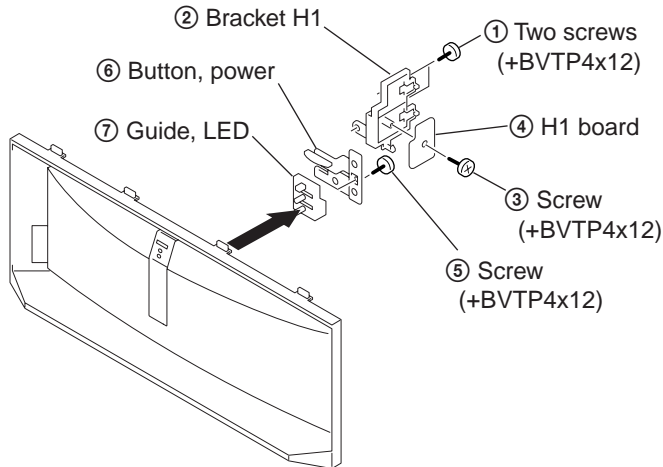
2-2. CHASSIS ASSY REMOVAL



2-4. H2 BOARD REMOVAL

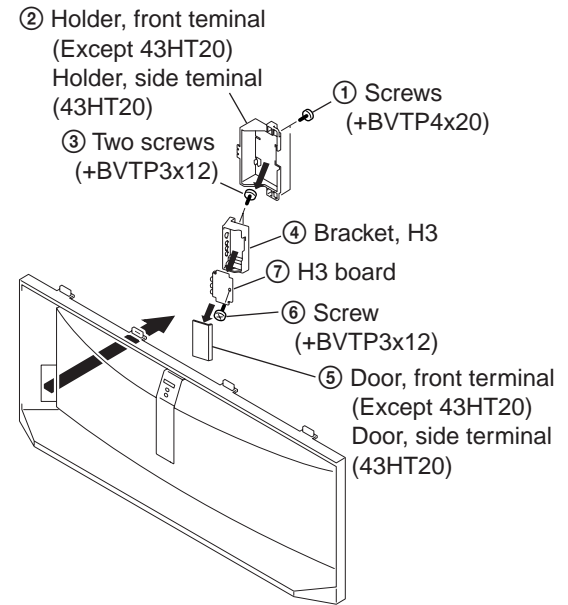


2-5. H1 BOARD REMOVAL

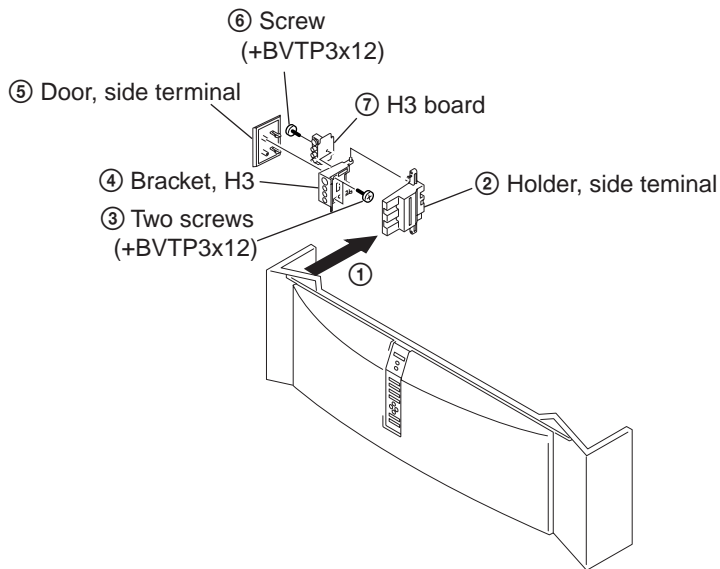


2-7. H3 BOARD REMOVAL

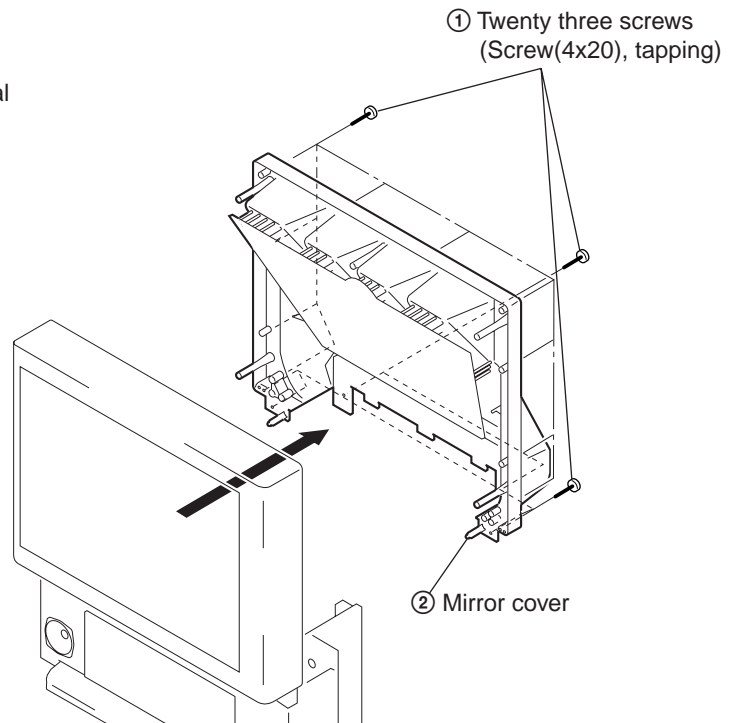
(KP-53HS20/53HS30/61HS20/61HS30)



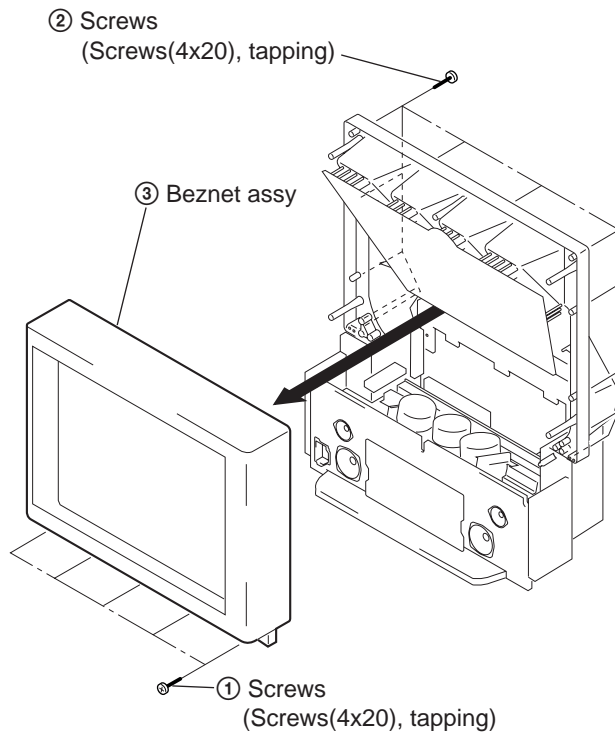
2-6. H3 BOARD REMOVAL (KP-43HT20)



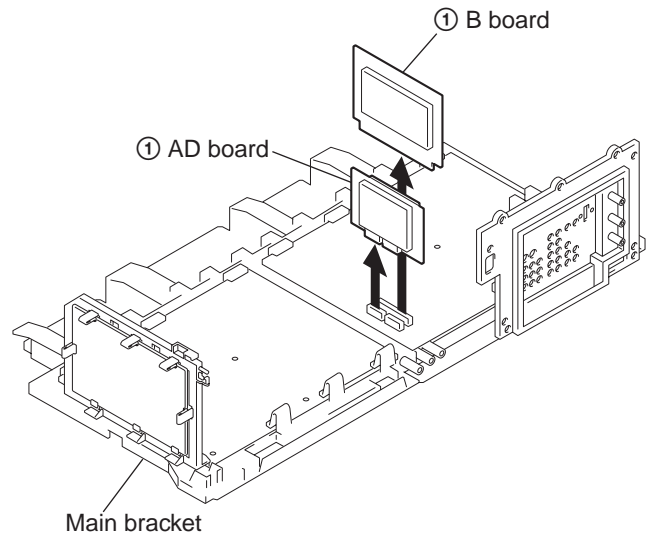
2-8. MIRROR COVER REMOVAL



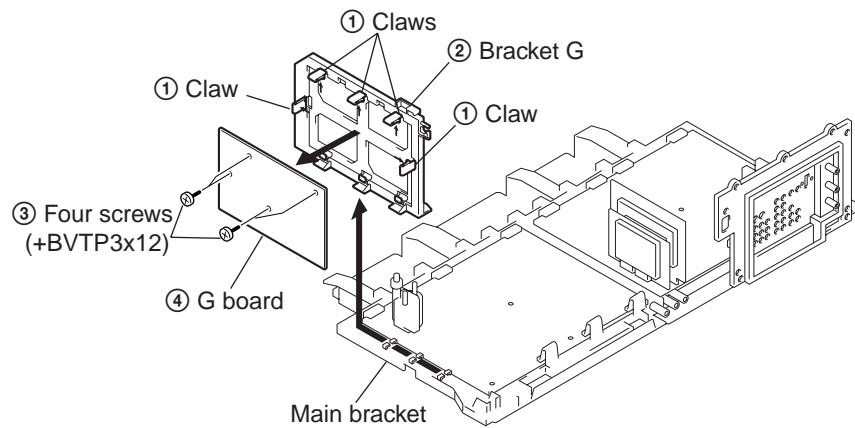
2-9. BEZNET ASSY REMOVAL



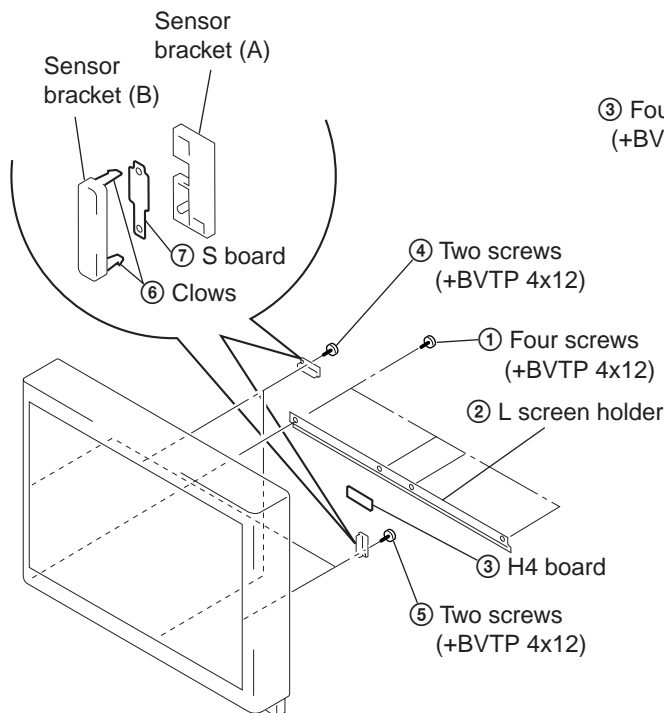
2-11. AD BOARD AND B BOARD REMOVAL



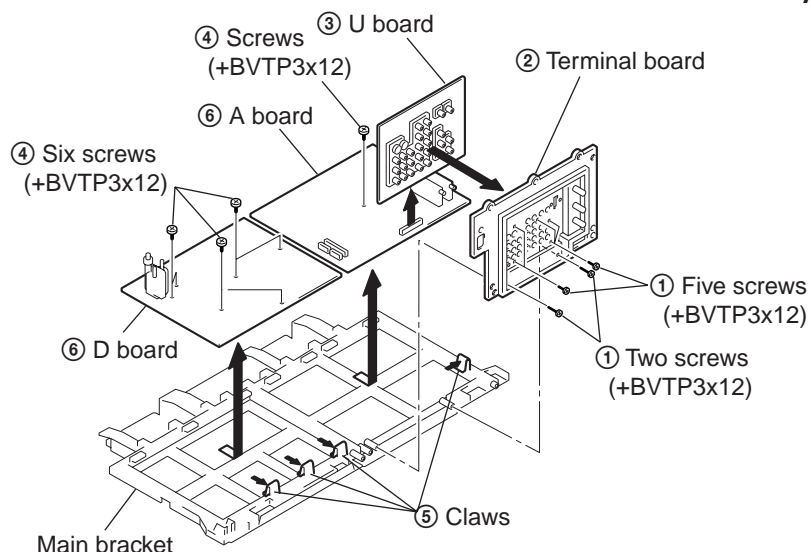
2-12. G BOARD REMOVAL



2-10. H4 BOARD AND S BOARD REMOVAL

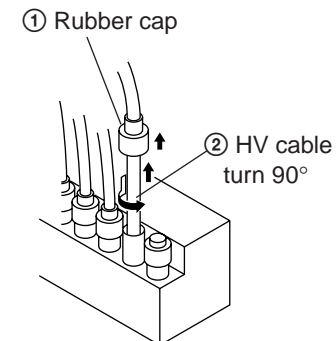


2-13. A BOARD, D BOARD AND U BOARD REMOVAL

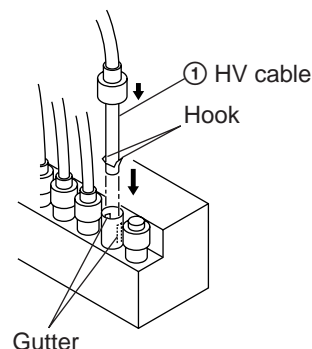


2-15-. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL

(1) Removal

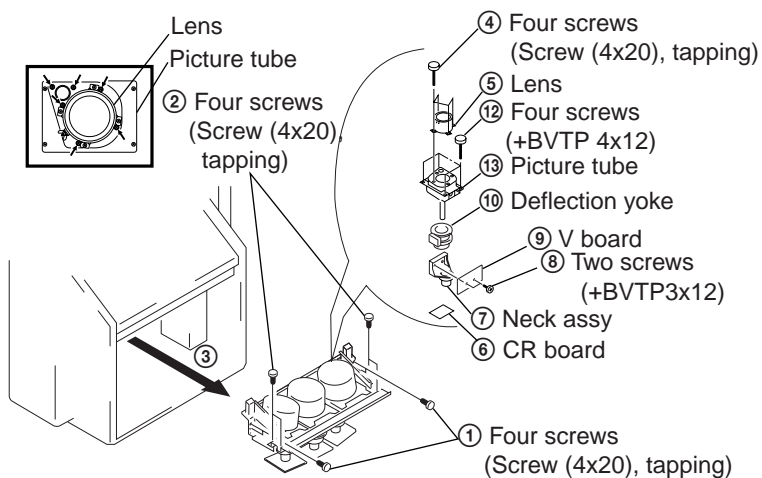


(2) Installation



2-14. PICTURE TUBE REMOVAL

CAUTION: Removing the arrow-marked screws is strictly prohibited. If removed, it may cause liquid spill.



SECTION 3

SET-UP ADJUSTMENTS

3-1. SCREEN VOLTAGE ADJUSTMENT (COARSE ADJUSTMENT)

1. Receive the Monoscope signal.
2. Set 50% BRIGHTNESS and minimum PICTURE.
3. Turn the red VR on the FOCUS block all the way to the left and then gradually turn it to the right until the point where you can see the retrace line.
4. Next gradually turn it to the left to the position where the retrace line disappears.

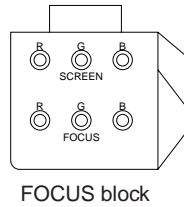


Fig. 3-1

3-2. SCREEN (G2) ADJUSTMENT (FINE ADJUSTMENT)

Fine Mode is recommended to set screen controls to their optimal condition. It is necessary to build the simple jig, illustrated below, using 3-watt resistors. Please note, that if the proper voltage is not obtained with their listed values, resistors, then please increase or decrease one of the values in the resistor network to obtain the correct voltage.

1. Select VIDEO1 mode without signals.
2. Connect G2 JIG.
3. SW on JIG.
4. Connect an oscilloscope to the TP7101(KR), TP7202(KG) and TP7301(KB) of CR board, CG board and CB board.
5. Adjust R, G and B screen voltage to $170 \pm 0.5V$ with screen VR on the Focus block.

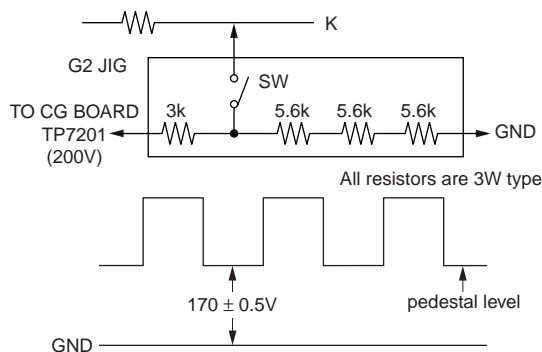


Fig. 3-2

3-3. DEFLECTION YOKE TILT ADJUSTMENT

1. Connect the color bar generator monoscope pattern to Video 1 input.
2. Cover the both red and blue picture lenses with the lens caps to show only the green color.
3. Loosen the deflection yoke set screw and align the tilt of the Deflection Yoke so that the bars at the center of the monoscope pattern are horizontal.
4. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT.
5. The tilt of the deflection yoke for red is aligned in the mode Cover the both green and blue picture lenses with the lens caps and the tilt of the deflection yoke for blue is aligned with in

the mode Cover the both green and red picture lenses with the lens caps is aligned the same as was done for green.

Note: Instead of items 2 and 5, you can cut off the unnecessary color beams by controlling the service mode CXA2150P-2 0 RGBS.

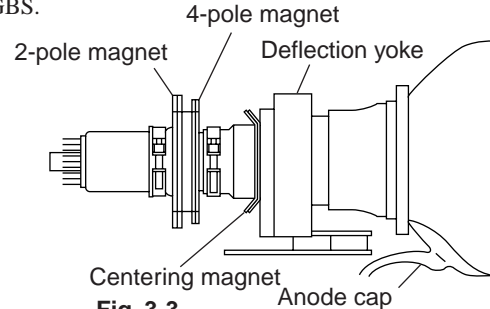


Fig. 3-3

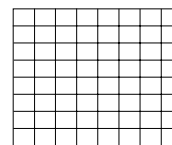
3-4. FOCUS LENS ADJUSTMENT

In this adjustment, use the remote commander in the service mode.

For details of the usage of the service mode and the remote commander, please refer the item 3-9. ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER.

1. Loosen the lens screw.
2. Cover the both red and blue picture lenses with the lens caps to show only the green color.
3. Turn the green lens to adjust to the optimum focus point with the crosshatch signal.
4. Tighten the lens screw.
5. Cover the both green and blue picture lenses with the lens caps to show only the red color.
6. Adjust red CRT lens just the same as green.
7. Cover the both green and red picture lenses with the lens caps to show only the blue color.
8. Adjust blue CRT lens just the same as green.
9. After adjusting the items 3-5. Focus VR Adjustment, 3-6. 2-Pole Magnet Adjustment and 3-7. 4-Pole Magnet Adjustment, adjust again to the optimum focus point.

*: Every time you press 6, the test signal changes to "crosshatch+video signal" - "crossbatch+borderline(black)" - "crosshach(black)" - "dots(black)" - off.



Test signal

Fig. 3-4

Note: Instead of items 2, 5 and 7, you can cut off the unnecessary color beams by controlling the service mode CXA2150P-2 0 RGBS.

3-5. FOCUS VR ADJUSTMENT

1. Set generator to crosshatch.
2. Cover the both red and blue picture lenses with the lens caps to show only the green color.
3. Turn the green focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
4. Cover the both green and blue picture lenses with the lens caps to show only the red color.
5. Turn the red focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
6. Cover the both green and red picture lenses with the lens caps to show only the blue color.
7. Turn the blue focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
8. After adjusting the items 3-4. Focus Lens Adjustment, 3-6. 2-Pole Magnet Adjustment and 3-7. 4-Pole Magnet Adjustment, adjust again to the optimum focus point.

Note: Instead of items 2, 4 and 6, you can cut off the unnecessary color beams by controlling the service mode 2150P-2 1 RGBS.

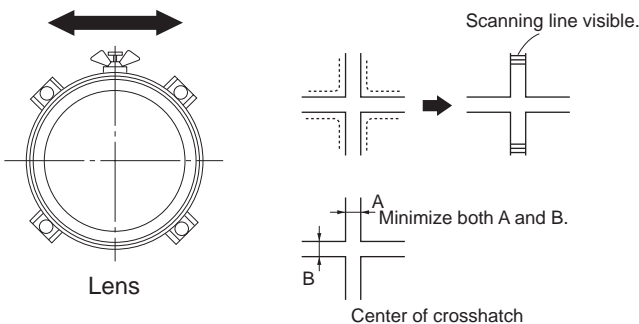


Fig. 3-5

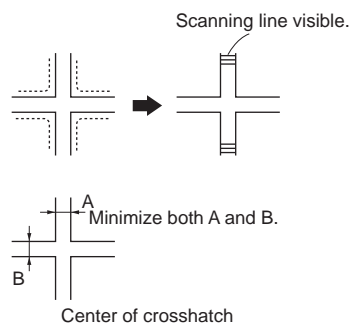


Fig. 3-6

3-6. 2-POLE MAGNET ADJUSTMENT

1. Set the picture mode to "Pro" and picture to MAX.
2. Receive the Dot signal.
3. Cover the both red and blue picture lenses with the lens caps to show only the green color.
4. Turn the green focus VR on the focus block to the left and set to overfocus to enlarge the spot.
5. Adjust 2-pole magnet so that the bright spot should be centered.
6. Align the green focus VR and set for just (precise) focus.
7. Perform the same alignment for red and blue.

Note: Instead of item 2 you can cut off the unnecessary color beams by controlling the service mode 2150P-2 1 RGBS.

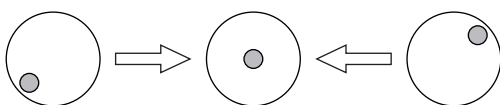


Fig. 3-7

3-7. CENTERING MAGNET ADJUSTMENT

1. Set the picture mode to "Pro".
2. Receive the monoscope signal.
3. Cover the both red and blue picture lenses with the lens caps to show only the green color.
4. Adjust the green centering magnet to put the center of the monoscope signal to the center of the screen.
5. Adjust the red centering magnet in the same way.
6. Adjust the blue centering magnet in the same way.

Note: Instead of item 2 you can cut off the unnecessary color beams by controlling the service mode 2150P-2 1 RGBS.

3-8. 4-POLE MAGNET ADJUSTMENT

1. Set the picture mode to "Pro" and picture to MAX.
2. Receive the Dot signal.
3. Cover the both red and blue picture lenses with the lens caps to show only the green color.
4. Turn the green focus VR on the focus block to the right and set the spot will become smaller.
5. Adjust the 4-Pole Magnet so that the spot becomes round for green and red.
6. Adjust blue spot to an oval shape X:Y=1:1.4 ~ 1.5.

Note: Instead of item 2 you can cut off the unnecessary color beams by controlling the service mode 2150P-2 1 RGBS.

Use the center dot

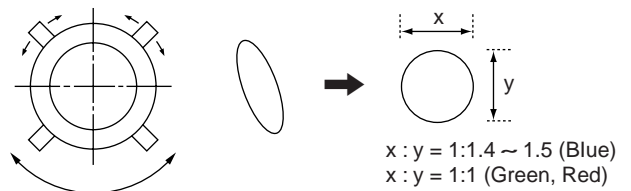


Fig. 3-8

3-9. DEFOCUS ADJUSTMENT (BLUE)

Note: Please adjust the blue dot to be slightly larger than red and green dots. This adjustment provides a more pleasing picture to the customer.

1. Select the picture mode to "Pro".
2. Receive the Dot signal.
3. Cover the both red and green picture lenses with the lens caps to show only the blue color.
4. Turn the blue focus VR on the focus block to right to make the round dot elipical.
5. Check flare with high luminance signal, make sure flare is minimal while dot shape is elipical.
6. Set generator to all white signal and check uniformity.

Note: Instead of item 3 you can cut off the unnecessary color beams by controlling the service mode 2150P-2 1 RGBS.

3-10.ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

By using Remote Commander (RM-Y908),all circuit adjustments can be made.

NOTE : Test Equipment Required.

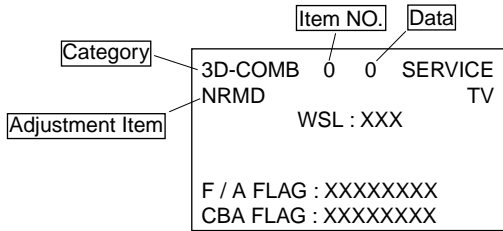
1. Pattern Generator (with component outputs)
2. Frequency counter
3. Digital multimeter
4. Audio oscillator

1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

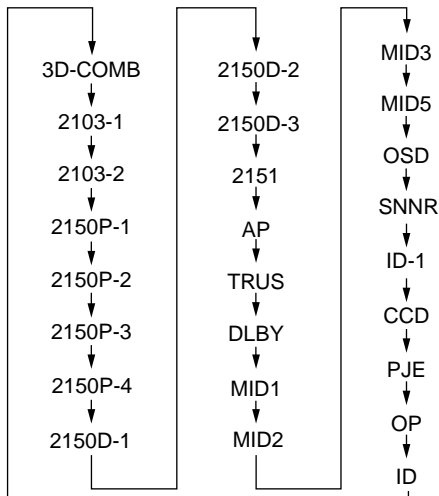
1. Standby mode. (Power off)
2. **DISPLAY** → **5** → **VOL (+)** → **TV POWER** on the Remote Commander.
(Press each button within a second.)

SERVICE MODE ADJUSTMENT



3. The SCREEN displays the item being adjusted.
4. Press **1** or **4** on the Remote Commander to select the adjustment item.
5. Press **3** or **6** on the Remote Commander to change the data.
6. Press **2** or **5** on the Remote Commander to select the category.

Every time you press 2(Category up), Service mode changes in the order as shown below.



7. If you want to recover the latest values press **0** then **ENTER** to read the memory.

8. Press **MUTING** then **ENTER** to write into memory.

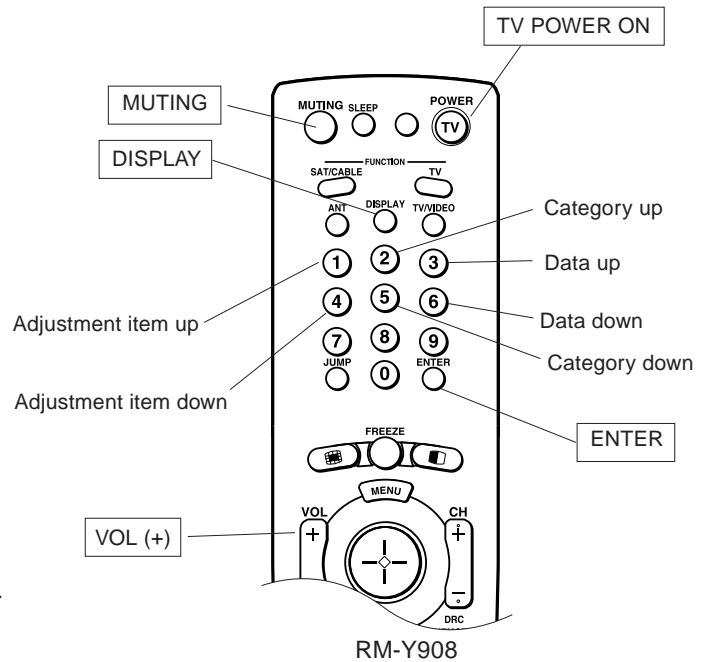
9. Turn power off.

Note: Press **8** then **ENTER** on the Remote Commander to initialize or turn set off and on to exit.

2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, turn power off with the remote commander.
2. Turn power on and set to Service Mode.
3. Call the adjusted items again and confirm they were adjusted.

3. ADJUSTING BUTTONS AND INDICATOR



Note : When the PJE mode is activated, which displays an internally generated signal, several buttons on the remote commander will have different functions than listed above. Therefore, when in the PJE mode, refer to page 26 for button functions.

4. SERVICE MODE LIST

Note: • shaded items are fixed. There is no need to change data. Others are different a little in the sets individually. Basically, there is no need to change data, too.

3D-COMIB uPD64082

| Reg.No & Name | FUNCTION | UHF/VHF & Video | | SVideo | |
|---------------|---|-----------------|--------------|-----------|--------------|
| | | Standard | Non-standard | Standard | Non-standard |
| 0 NRMD | Operation mode setting | 0 | 1 | 3 | 3 |
| 1 YAFS | Y-output correction | 3 | * | | |
| 2 CLKS | System clock setting | 1 | * | | |
| | | UHF/VHF & Video | | SVideo | |
| | | Standard | Non-standard | Standard | Non-standard |
| 3 NSDS | Selection for standard/non-standard signal processing | 0 | 0 | 0 | 0 |
| 4 MSS | Selection for inter-frame/inter-line processing | 0 | * | | |
| 5 KLS | Killer processing selection | 1 | * | | |
| | | UHF/VHF | | CV/SV | |
| | | Standard | Non-standard | Standard | Non-standard |
| 6 CDL | C-signal phase with respect to the Y-signal | 3 | 3 | | |
| | | NRMD-0 | | NRMD-1 | |
| 7 DYCO | DY detection coring level (Y motion detection coring) | 2 | 2 | 2 | 2 |
| 8 DYGA | DY detection gain (Y motion detection gain) | 10 | 10 | 10 | 10 |
| 9 DCCO | DC detection coring level (C motion detection coring) | 5 | 5 | 5 | 5 |
| 10 DCGA | DC detection gain (C motion detection gain) | 5 | 5 | 5 | 5 |
| 11 YNRL | Frame recursive YNR nonlinear filter limit level | 1 | * | | |
| 12 CNRL | Frame recursive CNR nonlinear filter limit level | 1 | * | | |
| | | UHF/VHF | | Video I-4 | |
| | | Standard | Non-standard | Standard | Non-standard |
| 13 VTRH | Hysteresis for Hsync non-standard signal detection | 1 | 1 | 1 | 1 |
| 14 VTRR | Sensitivity for Hsync non-standard signal detection | 1 | 1 | 1 | 1 |
| 15 LDSR | Sensitivity for frame non-standard signal detection | 2 | 2 | 2 | 2 |
| | | VM=off | | VM=Mid | |
| | | VM=Low | | VM=High | |
| 16 VAFG | V-aperture compensation gain | 0 | 0 | 0 | 0 |
| 17 VAPI | V-aperture compensation convergence point | 0 | 0 | 0 | 0 |
| | | SNNR=0 | | SNNR=1 | |
| 18 YPET | Y peaking filter (BPF) center frequency | 3 | 0 | 0 | 0 |
| 19 YPPG | Y peaking filter (BPF) gain | 9 | 0 | 1 | 2 |
| | | SNNR=0 | | SNNR=1 | |
| 20 YHCO | Y output high frequency component coring | 0 | 1 | 1 | 1 |
| 21 YHCG | Y output high frequency component coring gain | 1 | 1 | 1 | 1 |
| 22 HSSL | Hsync slice level | 12 | * | | |
| 23 VSSL | Vsync slice level | 8 | * | | |
| 24 ADCL | ADC clock delay | 3 | * | | |
| | | NRMD=0 | | NRMD=1 | |
| 25 D2GA | Moving detection gain | 4 | 4 | 4 | 4 |
| 26 KILR | Killer detection reference | 3 | * | | |

Note: YHCO & YHCG are defined directly by SNNR data.

3D-COMIB uPD64082

| Reg.No & Name | FUNCTION | UHF/VHF | | SVideo1 | | SVideo2 | | SVideo3 | | SVideo4 | |
|---------------|--|---------------------|--------------|-----------|--------------|----------|--------------|----------|--------------|----------|--------------|
| | | Standard | Non-standard | Standard | Non-standard | Standard | Non-standard | Standard | Non-standard | Standard | Non-standard |
| 27 OP | Option: Selection of comb filter/deconvulsive n.reduction bytes. | 1 | * | | | | | | | | |
| 28 NR1 | Noise reduction on/off | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 29 NR2 | SNNR control on/off | 0 | * | | | | | | | | |
| 30 WSI | Noise level detection level data | 0-255 | Read Data | | | | | | | | |
| 31 HPPL | H-PLL filter | 1 | * | | | | | | | | |
| 32 BPPL | Burst PLL filter | 1 | * | | | | | | | | |
| 33 FSCF | Burst extraction gain | 0 | * | | | | | | | | |
| 34 PLLF | PLL loop gain | 1 | * | | | | | | | | |
| | | UHF/VHF | | Video I-4 | | Video5&6 | | | | | |
| 35 CC3N | Selection if a line-comb filter C separation filter characteristic | 0 | 0 | 0 | 0 | | | | | | |
| 36 HDP | Fine adjustment of the system H-phase | 5 | * | | | | | | | | |
| 37 BGPS | Internal | 4 | * | | | | | | | | |
| 38 BCPW | | 10 | * | | | | | | | | |
| 39 TEST | Test bit (0:Normal mode 1:Test mode) * forbidden setting | 0 | * | | | | | | | | |
| 40 WSC | Amount of noise detection coring | 1 | * | | | | | | | | |
| | | UHF/VHF & Video I-4 | | Video5&6 | | | | | | | |
| 41 LIND | DRC-M line-doubling setting for non-standard signals UHF/VHF&Video I-4 | 0 | 0 | 2 | | | | | | | |
| 42 PFGO | (YPFG offset at GR on) * Not used | 3 | * | | | | | | | | |
| | | SNNR=0 | | SNNR=1 | | SNNR=2 | | SNNR=3 | | | |
| #16 VAFG | | 0 | 0 | 0 | 0 | | | | | | |

NTSC-YCT (Chroma Decoder) CXA2103-1 (Main)

| Reg.No & Name | FUNCTION |
|---------------|---|
| | UV & Video YCbCr-480i P&P Left P&P Right (M)-DRC (M)-DRC 34 40 27 46 UHF/VHF Video ADI (7) ADI (7) ADI (7) ADI (7) Y/C delay time 0 0 UHF/VHF Cvideo Svideo YCbCr-480i Sharpness 6 4 4 4 4 Sharpness f0 selector 3 3 3 3 3 Sharpness pre-overshoot ratio 3 0 0 0 0 Chroma band filter f0 setting 3 0 0 0 0 Chroma band filter Q setting 0 3 3 3 3 Chroma band filter on/off 1 0 0 0 0 Y block chroma trap filter on/off 0 0 0 0 0 Y Ch Cr Output LFP on/off 1 1 1 1 1 UHF/VHF Video YCbCr AFC Loop gain (PLL between Hsync & HVCO) 1 0 0 0 0 V countdown system mode selector 3 3 3 3 3 H&Vsync slide level setting 0 0 0 0 0 Masking of macrovision signal on/off 1 1 1 1 1 H automatic adjustment on/off 0 0 0 0 0 H TIM phase adjustment video 7 7 7 7 7 UV & Video YCbCr-480i P&P Left P&P Right (M)-DRC (M)-DRC 34 34 32 32 |
| | Single Picture 0 Auto-pedestal Inflection Point P&P & Favorite UBLK=0 DC Transmission Ratio P&P & Favorite UBLK=0 |
| 22 ATPD | P&P & Favorite UBLK-0 UBLK-1 UBLK-2 UBLK-3 UBLK-4 UBLK-5 UBLK-6 UBLK-7 1 1 2 1 1 2 3 2 0 2 1 2 2 2 2 3 |
| 23 DCTR | |

NTSC-YCT (Chroma Decoder) CXA2103-2 (Sub)

| Reg.No & Name | FUNCTION | UV & Video | | | | P&P Right | | | | P&P Left | | | |
|---------------|----------|--|--|-------------------|--|-------------------|--|-------------------|--|-------------------|--|-------------------|--|
| | | P&P Right (S) | | P&P Left (S) | | P&P Right (S) | | P&P Left (S) | | P&P Right (S) | | P&P Left (S) | |
| 0 | YLEV | Y-Out gain | | 34 | | 38 | | 34 | | 38 | | 34 | |
| 1 | CLEV | ChkCr-Out gain | | 27 | | 31 | | 27 | | 31 | | 27 | |
| 2 | SCON | Sub contrast | | UHF/VHF | | Video | | UHF/VHF | | Video | | UHF/VHF | |
| 3 | SCOL | Sub color | | ADI (7) | | ADI (7) | | ADI (7) | | ADI (7) | | ADI (7) | |
| 4 | SHUE | Sub hue | | ADI (7) | | ADI (7) | | ADI (7) | | ADI (7) | | ADI (7) | |
| 5 | YDL Y | Y/C delay time | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 6 | SHAP | Sharpness | | UHF/VHF | | Video | | UHF/VHF | | Video | | UHF/VHF | |
| 7 | SHFO | Sharpness (f) selector | | 4 | | 4 | | 4 | | 4 | | 4 | |
| 8 | PREO | Sharpness pre/over-shoot ratio | | 3 | | 3 | | 3 | | 3 | | 3 | |
| 9 | BPF0 | Chroma band filter (f) setting | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 10 | BPFQ | Chroma band filter Q setting | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 11 | BPSW | Chroma band filter on/off | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 12 | TRAP | Y black chroma trap filter on/off | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 13 | LPF | Y/Cb Cr-Output LPF on/off | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 14 | AVCG | AVC Loop gain (PLL between Hyanc & HYCO) | | UHF/VHF | | Video | | UHF/VHF | | Video | | UHF/VHF | |
| 15 | CDMD | V countdown system mode selector | | 1 | | 0 | | 1 | | 0 | | 1 | |
| 16 | SSMD | H&Vsync slide level setting | | 3 | | 3 | | 3 | | 3 | | 3 | |
| 17 | HMSK | Masking of macrovision signal on/off | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 18 | HALI | H automatic adjustment on/off | | 1 | | 1 | | 1 | | 1 | | 1 | |
| 19 | PPHA | H TIM phase adjustment video | | 0 | | 0 | | 0 | | 0 | | 0 | |
| 20 | CBOF | | | 7 | | 7 | | 7 | | 7 | | 7 | |
| 21 | CROF | | | UV & Video | | YC/Cr-480i | | UV & Video | | YC/Cr-480i | | UV & Video | |
| 22 | ATPD | Auto-pedestal Inflection Point P&P & Favorite UBLK=0 | | P&P Right (S)-DRC | | P&P Right (S)-DRC | | P&P Right (S)-DRC | | P&P Right (S)-DRC | | P&P Right (S)-DRC | |
| 23 | DCTR | DC Transmission Ratio P&P & Favorite UBLK=0 | | 32 | | 32 | | 32 | | 32 | | 32 | |
| | | | | 31 | | 31 | | 31 | | 31 | | 31 | |
| | | | | Single Picture | | Single Picture | | Single Picture | | Single Picture | | Single Picture | |
| | | | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | | | | 0 | | 0 | | 0 | | 0 | | 0 | |
| | | | | P&P & Favorite | | P&P & Favorite | | P&P & Favorite | | P&P & Favorite | | P&P & Favorite | |
| | | | | UBLK-0 | | UBLK-1 | | UBLK-2 | | UBLK-3 | | UBLK-4 | |
| | | | | 1 | | 1 | | 2 | | 1 | | 1 | |
| | | | | 2 | | 1 | | 1 | | 2 | | 2 | |
| | | | | UBLK-6 | | UBLK-5 | | UBLK-4 | | UBLK-3 | | UBLK-2 | |
| | | | | 3 | | 2 | | 3 | | 2 | | 3 | |
| | | | | UBLK-7 | | UBLK-6 | | UBLK-5 | | UBLK-4 | | UBLK-3 | |
| | | | | 2 | | 3 | | 2 | | 3 | | 2 | |
| | | | | 3 | | 2 | | 3 | | 2 | | 3 | |

Note: Reg.No 22 and 23 are the same data as CXA2103-1. (the same NVM address)

CRT Driver CXA2150P-1 (Picture Controls:P1)

| Reg.No & Name | FUNCTION | UHF/VHF | CV | SV | YCbCr480i | YCbCr480P | YCbCr1080i | P&P |
|---------------|----------|------------------------------------|---------------|----------------|---------------|----------------|----------------|-----|
| 0 | SBOOT | Offset for SBOOT | 0 | 0 | 7 | 7 | 7 | 7 |
| 1 | YOF | Y OFFSET: DC-offset for Y signal | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | CB OF | CB OFFSET: DC-offset for Cb signal | 35 | 35 | 37 | 40 | 31 | 35 |
| 3 | CR OF | CR OFFSET: DC-offset for Cr signal | 36 | 36 | 39 | 41 | 31 | 36 |
| 4 | SUB BRT | SUB BRT: Sub Bright | * | * | * | * | * | * |
| 5 | SBOOT | ADJ (24) | ADJ (31) | | | | | |
| 6 | GDRAV | G DRIVE: G output drive | 41 | | | | | |
| 7 | BDRAV | B DRIVE: B output drive | ADJ (31) | | | | | |
| 8 | RCUT | R CUTOFF: R output cutoff | ADJ (31) | | | | | |
| 9 | GCUT | G CUTOFF: G output cutoff | 31 | | | | | |
| 10 | BCUT | B CUTOFF: B output cutoff | ADJ (31) | | | | | |
| 11 | WB SW | WB SW | Std (Neutral) | Movie (Warm) | 0 (no memory) | 0 (no memory) | Pro | |
| 12 | SBOOT | Offset for SBOOT | 63 | 63 (no memory) | 63 | 63 (no memory) | 63 (no memory) | |
| 13 | RDOF | Offset for RDRV | 63 | 63 (no memory) | 66 | 63 (no memory) | 63 (no memory) | |
| 14 | GDOF | Offset for GDRV | 63 | 63 (no memory) | 63 | 63 (no memory) | 63 (no memory) | |
| 15 | BDOF | Offset for BDRV | 68 | 63 (no memory) | 56 | 63 (no memory) | 63 (no memory) | |
| 16 | RCOF | Offset for RCUT | 63 | 63 (no memory) | 64 | 63 (no memory) | 63 (no memory) | |
| 17 | GCOF | Offset for GCUT | 63 | 63 (no memory) | 63 | 63 (no memory) | 63 (no memory) | |
| 18 | BCOF | Offset for BCUT | 64 | 63 (no memory) | 63 | 63 (no memory) | 63 (no memory) | |

CRT Driver CXA2150P-2 (Picture Controls:P2)

| Reg.No & Name | FUNCTION | UHF/VHF | CV | SV | YCbCr480i | YCbCr480P | YCbCr1080i | P&P |
|---------------|----------|--|--------------|-----------|-----------|------------|------------|-----|
| 0 | ALBK | PIC ON | 1 | | | | | |
| 1 | RGBS | R ON/G ON/B ON : R/G/B outputs on/off | 7 | * | | | | |
| 2 | BLKB | BLK BTM: RGB output bottom limit level (Black level) | 3 | * | | | | |
| 3 | LIML | PLIMIT LEV: Threshold level for excessively high inputs | 0 | * | | | | |
| 4 | PABL | P ABL: DC-level in RGB output detection for PEAK ABL | 15 | * | | | | |
| 5 | SABL | S ABL: S ABL gain | 0 | * | | | | |
| 6 | AGING | AGING W/AGING B: AGING W/AGING B modes on/off | 0 | * | | | | |
| 7 | AKRO | AKROFF: Automatic/Manual : Cut off setting | 0 | * | | | | |
| 8 | SYPH | SYNC PHASE: Hsync delay with respect to Video (100% H-period) | UHF/VHF V1_4 | YCbCr480i | YCbCr480P | YCbCr1080i | P&P | |
| 9 | CLPH | CLP PHASE: Internal clamp pulse phase (100% H-period) | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | CLGA | CLP GATE: Switch for the gated internal clamp pulse with Hsync | 3 | 3 | 3 | 3 | 3 | 3 |
| 11 | JAXS | JAXIS: color axis switch | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | BLKO | BLKO: Blanking switch | 0 | * | | | | |

CRT Driver CXA2150P-3 (Picture Controls:P3) (Part1)

| Reg.No & Name | FUNCTION | UHF/VHF | CV | SV | YCbCr480i | YCbCr480P | YCbCr1080i | P&P |
|---------------|----------|---|----|----|-----------|-----------|------------|-----|
| 0 | SYSTEM | Signal bandwidth setting | 1 | 1 | 1 | 1 | 2 | 2 |
| 1 | UVML | VM LEV: VM OUT level | 3 | 3 | 3 | 2 | 3 | 3 |
| 2 | VMMO | System Micro pin40 | 1 | 1 | 1 | 1 | 1 | 0 |
| 3 | VMCR | VM COR: VM OUT color level | 0 | 0 | 0 | 1 | 3 | 3 |
| 4 | VMLM | VM LMT: VM OUT limit level | 3 | 3 | 3 | 3 | 3 | 3 |
| 5 | VMFO | VM FO: VM FO | 2 | 2 | 2 | 2 | 2 | 2 |
| 6 | VMDL | VM DLYVM OUT phase (defined by phase difference from R OUT) | 2 | 2 | 2 | 2 | 1 | 1 |
| 7 | SHOF | Offset for USHP-SHOF x 4 | 0 | 2 | 2 | 3 | 3 | 3 |
| 8 | SHFO | SHP FO: Sharpness circuit FO | 1 | 1 | 1 | 1 | 0 | 1 |
| 9 | PROV | PRE OVER: Y signal pre-over-short ratio | 1 | 0 | 0 | 0 | 2 | 0 |
| 10 | FLIV | SHP FI: Sharpness for higher fi (4.25.6MHz @NORMAL mode) | 3 | 3 | 3 | 0 | 1 | 3 |
| 11 | CDSF | SHP CD: Sharpness in part of high color saturation | 3 | 3 | 3 | 3 | 3 | 3 |
| 12 | LTLV | LTI LEV: Luminance transient improvement (LTI) | 3 | 3 | 3 | 3 | 3 | 3 |
| 13 | LTMD | LTI MODE: LTI mode setting | 0 | 0 | 0 | 0 | 1 | 1 |
| 14 | CTLV | CTI LEV: Chrominance transient improvement (CTI) | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | CTMD | CTI MODE: CTI mode setting | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 | UBOF | Offset for UBERT (Picture clarity adjustment) | 0 | 0 | 0 | 0 | 13 | 9 |
| 17 | UCOF | Offset for UCOL=UCOF x 2 (Picture clarity adjustment) | 3 | 3 | 3 | 3 | 3 | 0 |
| 18 | UHOE | Offset for UHUE (Picture clarity adjustment) | 0 | 0 | 0 | 0 | 0 | 0 |
| 19 | MIDE | MID enhancement setting | 3 | 15 | 15 | 7 | 11 | 0 |

CRT Driver CXA2150P-3 (Picture Controls:P3) (Part2)

| Reg.No & Name | FUNCTION | Standard | | | | Movie | | | | Pro | | | | | |
|---------------|----------|----------|----|----|------------|------------|-------------|-----|---------|-----|----|------------|------------|-------------|-----|
| | | UHF VHF | CV | SV | YCbCr 480i | YCbCr 480P | YCbCr 1080i | P&P | UHF VHF | CV | SV | YCbCr 480i | YCbCr 480P | YCbCr 1080i | P&P |
| #0 | SYSM | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| #1 | UVML | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| #2 | VMMO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #3 | VMCR | 0 | 0 | 0 | 1 | 1 | 3 | 3 | 1 | 1 | 1 | 1 | 3 | 3 | 3 |
| #4 | VMLM | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| #5 | VMF0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| #6 | VMDL | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| #7 | SHOF | 1 | 1 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| #8 | SHF0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| #9 | PROV | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| #10 | FLV | 3 | 3 | 3 | 0 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| #11 | CDSP | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #12 | LTIV | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #13 | LTMD | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| #14 | CTIV | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #15 | CTMD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #16 | UHOF | 15 | 15 | 15 | 12 | 12 | 4 | 4 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| #17 | UCOF | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #18 | UHOF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #19 | MIDE | 2 | 14 | 14 | 6 | 10 | - | - | 1 | 13 | 13 | 5 | 9 | - | - |

CRT Driver CXA2150P-3 (Picture Controls:P3) (Part3)

| Reg.No & Name | FUNCTION | SNNR=0 | SNNR=1 | SNNR=2 | SNNR=3 |
|---------------|----------|--------|--------|--------|--------|
| #1 | UVML | 0 | 0 | 0 | 0 |
| #3 | VMCR | 0 | +1 | +2 | +3 |
| #10 | FLV | 0 | -1 | -2 | -3 |
| #11 | CDSP | 0 | 0 | 0 | 0 |
| #12 | LTIV | 0 | 0 | 0 | 0 |
| #14 | CTIV | 0 | 0 | 0 | 0 |
| #19 | MIDE | 0 | 0 | 0 | 0 |

CRT Driver CXA2150P-4 (Picture Controls:P4)

| Reg.No & Name | FUNCTION | Vivid | Standard | Movie | Pro |
|---------------|----------|---|--|-----------|------------|
| 0 | UPIC | 63 | 44 | 31 | 31 |
| 1 | UBRT | 26 | 31 | 31 | 31 |
| 2 | UCOL | 31 | 31 | 31 | 31 |
| 3 | UHUE | 31 | 31 | 31 | 31 |
| 4 | USHP | 32 | 40 | 31 | 31 |
| 5 | UTMP | 2 | 1 | 0 | 1 |
| 6 | UDCL | 2 | 2 | 0 | 0 |
| 7 | AXIS | UHF/VHF V1-4 | YCbCr480i | YCbCr480P | YCbCr1080i |
| 8 | UGAM | 5 | 4 | 4 | 5 |
| 9 | AGAM | UGAM-0 | UGAM-1 | UGAM-2 | UGAM-3 |
| 10 | GSRO | 0 | 0 | 0 | 0 |
| 11 | GCOC | 0 | 0 | 0 | 0 |
| 12 | GHUO | 0 | 0 | 0 | 0 |
| 13 | UBLK | 7 | 6 | 6 | 6 |
| 14 | ABLK | UBLK0 | UBLK1 | UBLK2 | UBLK3 |
| 15 | DCTR | 1 | 1 | 1 | 2 |
| 16 | DPIC | 0 | 1 | 2 | 1 |
| 17 | DSHO | 7 | 7 | 7 | 7 |
| 18 | ABLM | 0 | 0 | 0 | 0 |
| 19 | ABLT | Full | Vcomp 1 & 2 | | |
| 20 | EPOF | 0 | 15 | | |
| 21 | SPOF | Offset for UPIC-EPOF x (UPIC/63) (for power save) - Void Data | Offset for UPIC-SPOF x (UPIC/64) - Data Not used | | |
| 22 | SCON | 15 | UHF/VHF V1-4 | YCbCr480P | YCbCr1080i |
| 23 | CLOF | 12 | 9 | 9 | 8 |
| 24 | HUOF | 9 | 9 | 9 | 9 |
| 25 | UDSW | 5 | 5 | 5 | 5 |
| 26 | DATA | Full | Vcomp 1 | Vcomp2 | |

Note: Full: 4:3
 Vcomp1: 480p-960i, 16:9
 Vcomp2: 1080i, 16:9

CRT Driver CXA2150P-4 (Picture Controls:P4)

| Reg.No & Name | FUNCTION | SNR | | | | Picture Mode : Standard | | | | Picture Mode : Movie | | | | Picture Mode : Pro | | | |
|---------------|----------|-----|-------|-------|-----|-------------------------|-------|-------|-------|----------------------|-------|-------|-------|--------------------|-------|-------|-------|
| | | UHF | YCbCr | YCbCr | P&P | UHF | YCbCr | YCbCr | P&P | UHF | YCbCr | YCbCr | P&P | UHF | YCbCr | YCbCr | P&P |
| #4 | USHP | =0 | =1 | =2 | =3 | 480i | 480P | 1080i | 1080i | 480i | 480P | 1080i | 1080i | 480i | 480P | 1080i | 1080i |
| | | 0 | 1 | 3 | 4 | VI_4 | | | | VI_4 | | | | VI_4 | | | |
| #8 | UGAM | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| #13 | UBLK | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

CRT Driver CXA2150D-1 (Deflection Controls:D1)

| Reg.No & Name | FUNCTION | 4:3 | | | |
|---------------|--|------|----------|--------|--|
| | | Full | Vcomp1 | Vcomp2 | |
| 0 | V POSION: Vertical position (V DRV signal DC bias) | | ADI (31) | | |
| 1 | VSIZ | | ADI (50) | | |
| 2 | VSZO | | | 0 | |
| 3 | VLIN | | | 5 | |
| 4 | VSCO | | | 8 | |
| 5 | VZEN | | | 31 | |
| 6 | VPIN | | | 15 | |
| 7 | NSCO | | | 7 | |
| 8 | HITFZ | | | 15 | |
| 9 | ZOOM | | | 0 | |
| 10 | APSW | | | 0 | |
| 11 | ASPT | | | 44 | |
| 12 | SCRL | | | 29 | |
| 13 | UVLN | | | 0 | |
| 14 | LVLN | | | 0 | |

CRT Driver CXA2150D-2 (Deflection Controls:D2)

| Reg.No & Name | FUNCTION | Full | Vcomp1 | Vcomp2 |
|---------------|-------------------------------|------|--------|----------|
| 0 | HC PARA DC: Horizontal center | 19 | | 19 |
| 1 | HPQS | | | |
| 2 | HSZ | | | 25 |
| 3 | SLIN | | | ADI (30) |
| 4 | MPIN | | | 7 |
| 5 | PIN | | | 10 |
| 6 | PIN0 | | | 7 |
| 7 | UCP | | | 31 |
| 8 | LCP | | | 31 |
| 9 | UXCG | | | 0 |
| 10 | LXCG | | | 0 |
| 11 | UXCP | | | 2 |
| 12 | LXCP | | | 2 |
| 13 | XCP | | | 0 |
| 14 | PPHA | | | 31 |
| 15 | VANG | | | 31 |
| 16 | L'ANG | | | 31 |
| 17 | V'BOW | | | 31 |
| 18 | L'BOW | | | 63 |
| 19 | CPV1 | | | 0 |

CRT Driver CXA2150D-3 (Deflection Controls:D3)

| Reg.No & Name | FUNCTION | Full | Vcomp1 | Vcomp2 |
|---------------|-------------------------------------|------|--------|--------|
| 0 HBLK | HBLK SW: Horizontal blanking switch | | 1 | |
| 1 LBLK | LBLK SW: Left blanking | | 56 | 56 |
| 2 RBLK | RBLK SW: Right blanking | | 25 | 25 |
| 3 VBLK | VBLK SW: Vertical blanking switch | 1 | | 1 |
| 4 UP BLK | UP BLK: Top blanking | 15 | 14 | 12 |
| 5 HBLK | LO BLK: Bottom blanking | 15 | 15 | 13 |
| 6 VCOMP | V COMP: Vertical compensation | 0 | 3 | 3 |
| 7 HCOMP | H COMP: Horizontal compensation | 0 | | 0 |
| 8 ACMP | AFC COMP: AFC compensation | 0 | | 0 |
| 9 PCMP | PIN COMP: Pin compensation | 0 | | 0 |
| 10 AFCM | AFC MODE: AFC compensation | 3 | | 2 |
| 11 VFRQ | V FREQ: Vertical frequency | | 1 | |
| 12 VON | V ON: Vertical drive on | | 1 | |
| 13 IUMP | IMP SW: Reference pulse jump switch | 0 | | 1 |
| 14 VDIP | VDRV SW: Vertical drive switch | 1 | 1 | 1 |
| 15 VDST | RST SW: Vertical drive start switch | 0 | 0 | 0 |
| 16 EWDC | EW DC: Pin DC level shift | 0 | | 0 |
| 17 AKBT | AKBTIM: AKB timing | 9 | 9 | 9 |

Component I/F & Sync Separation CXA2151

| Reg.No & Name | FUNCTION | 480i | 480P | 1080i | 720P |
|---------------|-----------------------------------|----------|----------|----------|-------|
| 0 MTRX | MAT OUT | 15.75kHz | 31.50kHz | 33.75kHz | 45kHz |
| 1 GAIN | GAIN SEL | 0 | 0 | 1 | 1 |
| 2 CBGN | CBGAIN | 9 | | | |
| 3 VTC | V TC | 1 | | | |
| 4 HWID | H WIDTH | 1 | | | |
| 5 HSEP | HSEP SEL | Video5 | Video6 | Sub | |
| 6 TEST | TEST | 0 | 0 | 0 | |
| 7 FRGB | FRGB | 0 | | | |
| 8 HMK | Hsync masking in vertical retrace | Full | Vcomp1 | Vcomp2 | 0 |

Audio Processor (AP) BH3868FS

| Reg.No & Name | FUNCTION | 43", 53" | 61" |
|---------------|-----------------------------|----------|-----|
| 0 ISVOL | Volume: Offset for Volume | 0 | 0 |
| 1 SBAL | Balance: Offset for Balance | 7 | 7 |
| 2 SBAS | Bass: Offset for Bass | 7 | 11 |
| 3 STRE | Treble: Offset for Treble | 7 | 6 |
| 4 BBLP | BBE low pass filter | 0 | 0 |
| 5 BBHP | BBE high pass filter | 2 | 2 |
| 6 SREF | Surround effect | 11 | 11 |
| 7 AGC | Auto gain control | 0 | 0 |
| 8 BBE | BBE on/off | 0 | 0 |

TruSurround (TRUS) NJM2180

| Reg.No & Name | FUNCTION | |
|---------------|------------------------------|---|
| 1 TSMD | Trusurround effect selection | 2 |
| 0 ATT | | 0 |

MID-1 (Display Data : Output)

| Reg.No & Name | FUNCTION | (for 4:3) |
|------------------------------|--|-----------------|
| (A) Display Data (Only One) | | |
| 0 | DHPH H active display area phase | 110 |
| 1 | DVPH V active display area phase | 20 |
| 2 | DHAR H active display area size | 240 |
| 3 | DVAR V active display area size | 135 |
| 4 | DHPW display H pulse width | 55 |
| 5 | DVPW display V pulse width | 5 |
| 22 | DPSW display PLL switch | 1 (fixed) |
| 23 | MDL model select (16/9/4:3) | 1 |
| (B) Misc. Common Data | | |
| 6 | DYCD display output Y-C delay correction | Data |
| 7 | DYSD display output YS signal delay select | 2 |
| (C) Favorite / Other | | |
| | Favorite | Others |
| 8 | MDHP main display picture H position | 9 |
| 10 | MDHS main display picture H size | 160 |
| | Single (Input Signal Format) / Favorite | Single 720P 240 |
| 9 | MDVP main display picture V position | 30 |
| 11 | MDVS main display picture V size | 120 |
| | Index | 27 |
| | Others | 81 |
| 12 | MLHP multi picture mode H position | 32 |
| 13 | MLVP multi picture mode V position | 36 |
| | Others | 31 |
| (F) Favorite | | |
| 14 | SDHS sub display picture H position | 171 |
| 15 | SDVS sub display picture V position | 27 |
| | Favorite | |
| 16 | SDHS sub display picture H size | 59 |
| 17 | SDVS sub display picture V size | 29 |
| (H) PinP Position (Not Used) | | |
| 18 | PDHP (PinP Large mode H position) | - |
| 19 | PDVS (PinP Large mode V position) | - |
| (I) PinP Size (Not Used) | | |
| 20 | PDHS (PinP Large mode H size) | - |
| 21 | PDVS (PinP Large mode V size) | - |
| (J) Single / Others | | |
| | Single | Others |
| 24 | BCOL background Y level | 0 |
| | Others | 5 |

MID-2 (Active Data for DRC : INPUT)

| Reg.No & Name | FUNCTION | Single | Memo |
|--|---------------------------------|---------------|-------|
| (A) MID Mode, Wide mode, Input Signal Format | | | |
| | | RF, Video, YC | YPbPr |
| 0 | DRHP DRC H active area position | 111 | 110 |
| 1 | DRHS DRC H active area size | 178 | 178 |
| 2 | DRVP DRC V active area position | 37 | 37 |
| 3 | DRVS DRC V active area size | 120 | 120 |
| Twin, Favorite | | | |
| | | RF, Video, YC | YPbPr |
| 0 | DRHP DRC H active area position | 132 | 131 |
| 1 | DRHS DRC H active area size | 166 | 166 |
| 2 | DRVP DRC V active area position | 54 | 54 |
| 3 | DRVS DRC V active area size | 112 | 112 |
| Index | | | |
| | | RF, Video, YC | YPbPr |
| 0 | DRHP DRC H active area position | 139 | 138 |
| 1 | DRHS DRC H active area size | 164 | 164 |
| 2 | DRVP DRC V active area position | 50 | 50 |
| 3 | DRVS DRC V active area size | 114 | 114 |
| Twin-Right Index-Small | | | |
| | | RF, Video, YC | YPbPr |
| 0 | DRHP DRC H active area position | 142 | 141 |
| 1 | DRHS DRC H active area size | 162 | 162 |
| 2 | DRVP DRC V active area position | 58 | 58 |
| 3 | DRVS DRC V active area size | 110 | 110 |
| Index-Small | | | |
| | | RF, Video, YC | YPbPr |
| 0 | DRHP DRC H active area position | 143 | 143 |
| 1 | DRHS DRC H active area size | 166 | 166 |
| 2 | DRVP DRC V active area position | 54 | 54 |
| 3 | DRVS DRC V active area size | 112 | 112 |

MID-3 (Active Data for A/D (VDO) : INPUT)

| Reg.No. & Name | FUNCTION | | | | |
|----------------|--|------|-----------------|-----------------|---------------------|
| | (A) MID mode, Wide mode, Input Signal Format | | | | |
| | Single | | | | |
| | 480P | 720P | YPhPr No Signal | YPhPr No Signal | Twin-Right |
| 0 VDHP | VDO H active area position | 109 | 95 | 205 | |
| 1 VDHS | VDO H active area pixel size | 166 | 108 | 226 | |
| 2 VDVE | VDO V active area even position | 37 | 24 | 37 | |
| 3 VDVS | VDO V active area line size | 120 | 180 | 56 | |
| | Twin, Favorite | | | | |
| | 480P | 720P | YPhPr No Signal | YPhPr No Signal | Ref. Video, S-Video |
| 0 VDHP | VDO H active area position | 128 | 94 | 111 | 197 |
| 1 VDHS | VDO H active area pixel size | 155 | 150 | 99 | 215 |
| 2 VDVE | VDO V active area even position | 53 | 37 | 50 | 26 |
| 3 VDVS | VDO V active area line size | 112 | 126 | 168 | 56 |
| | Memo | | | | |
| | 480P | 720P | YPhPr No Signal | YPhPr No Signal | |
| 0 VDHP | VDO H active area position | 136 | 102 | 115 | 179 |
| 1 VDHS | VDO H active area pixel size | 152 | 147 | 98 | 199 |
| 2 VDVE | VDO V active area even position | 57 | 44 | 58 | 24 |
| 3 VDVS | VDO V active area line size | 110 | 123 | 164 | 56 |
| | Index | | | | |
| | 480P | 720P | YPhPr No Signal | YPhPr No Signal | Index-Small |
| 0 VDHP | VDO H active area position | 132 | 99 | 112 | 166 |
| 1 VDHS | VDO H active area pixel size | 154 | 149 | 99 | 187 |
| 2 VDVE | VDO V active area even position | 51 | 34 | 48 | 24 |
| 3 VDVS | VDO V active area line size | 113 | 128 | 169 | 56 |
| | (B) Input Signal Format | | | | |
| | RF, Video, S-Video, YPhPr 480i | | | | |
| | 480P | 720P | 1080i | 720P | 720P |
| 4 VDVO | VDO V active area line size | 0 | 0 | 0 | 0 |
| 5 VCPO | VDO V active area odd position | 95 | 70 | 40 | 40 |
| 6 VCWD | VDO clamp pulse output timing | 3 | 3 | 3 | 3 |
| 7 VYCD | VDO clamp pulse width | 0 | 0 | 0 | 0 |
| 8 VSTP | VDO PLL phase direct stop line count | - | 119 | 160 | 146 |
| 9 VSTT | VDO PLL phase direct start line count | - | 4 | 0 | 0 |
| 10 VHSC | VDO H sync cycle | 130 | - | - | - |

MID-5 (Picture Data) (A) Enhance Table Data Setting

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---------|-------------------------------------|---|---|----|----|----|----|----|
| 0 JP-OP | Table select | 1 | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 MHLY | Main H LPP Y Coefficient select | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 MHLCL | Main H LPP C Coefficient select | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 3 MVLY | Main V LPP Y Coefficient select | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 MVLCL | Main V LPP C Coefficient select | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 MHYR | Main H Enhance Y Coring level | 0 | 0 | 1 | 1 | 0 | 0 | 1 |
| 6 MHYL | Main H Enhance Y Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 MHYE | Main H Enhance Y Enhancement level | 7 | 7 | 3 | 3 | 7 | 7 | 3 |
| 8 MHYO | Main H Enhance Y Coefficient select | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 MHCR | Main H Enhance C Coring level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 MHCL | Main H Enhance C Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 MHCE | Main H Enhance C Enhancement level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 MHCO | Main H Enhance C Coefficient select | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 13 MVYR | Main V Enhance Y Coring level | 0 | 0 | 2 | 2 | 0 | 0 | 2 |
| 14 MVYL | Main V Enhance Y Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 MVYE | Main V Enhance Y Enhancement level | 0 | 0 | 2 | 5 | 0 | 0 | 2 |
| 16 MVCR | Main V Enhance C Coring level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 MVCL | Main V Enhance C Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 18 MVCE | Main V Enhance C Enhancement level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 JP-OP | Table select | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1 MHLY | Main H LPP Y Coefficient select | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 2 MHLCL | Main H LPP C Coefficient select | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 3 MVLY | Main V LPP Y Coefficient select | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 MVLCL | Main V LPP C Coefficient select | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 MHYR | Main H Enhance Y Coring level | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 6 MHYL | Main H Enhance Y Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 MHYE | Main H Enhance Y Enhancement level | 7 | 7 | 3 | 5 | 7 | 7 | 3 |
| 8 MHYO | Main H Enhance Y Coefficient select | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 MHCR | Main H Enhance C Coring level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 MHCL | Main H Enhance C Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 MHCE | Main H Enhance C Enhancement level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 MHCO | Main H Enhance C Coefficient select | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 13 MVYR | Main V Enhance Y Coring level | 0 | 0 | 2 | 2 | 0 | 0 | 2 |
| 14 MVYL | Main V Enhance Y Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 15 MVYE | Main V Enhance Y Enhancement level | 0 | 0 | 2 | 5 | 0 | 0 | 2 |
| 16 MVCR | Main V Enhance C Coring level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 MVCL | Main V Enhance C Clip level | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 18 MVCE | Main V Enhance C Enhancement level | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

* No.19 - No.36 data is all "0", not to use.

On-Screen Display (OSD)

| Reg.No. & Name | FUNCTION | |
|----------------|---------------------------------------|----|
| 0 HPOS | OSD horizontal position | 14 |
| 1 HPROF | Horizontal position for Favorite mode | 37 |
| 2 VPOS | OSD vertical position | 4 |
| 3 VPOT | Vertical position for P&P (Twin) mode | 40 |

SNNR

| Reg.No. & Name | FUNCTION | | | | |
|----------------|---|------|-------|--------|---------|
| 0 SNNR | SNNR data setting | 0 | 1 | 2 | 3 |
| 1 SNPF | Selection of SNNR data setting | 0 | | | |
| 2 WSLT | Noise level detection data thresholds for SNNR data (read data) | 0-30 | 31-62 | 63-126 | 127-255 |
| | SNNR Settings based on WSL Data | | | | |
| 3 SNNR-0/1/2/3 | | 0 | 1 | 2 | 3 |
| 4 CPTG | Related to 3D-COMB upD64802 / #19 YPRG settings | 0 | 1 | 2 | 3 |
| 4 CPTT | Related to 3D-COMB upD64802 / #18 YPPT settings | 0 | 0 | 0 | 0 |
| 5 CCOR | Related to 3D-COMB upD64802 / #20 VHCO settings | 0 | 1 | 1 | 1 |
| 6 CHCG | Related to 3D-COMB upD64802 / #21 VHCG settings | 1 | 1 | 1 | 1 |
| 7 CARG | Related to 3D-COMB upD64802 / #16 VARG settings | 0 | 0 | 0 | 0 |
| 8 SSHP | Related to CXA2103 / #6 SHAP settings | 0 | 1 | 2 | 3 |
| 9 MIDD | Related to CXA2150P-3 / #19 MIDE settings | 0 | 0 | 0 | 0 |
| 10 SSHP | Related to CXA2150P-4 / #4 USHP settings | 0 | 1 | 3 | 4 |
| 11 SYFI | Related to CXA2150P-3 / #10 FILV settings | 0 | 1 | 2 | 3 |
| 12 SCDS | Related to CXA2150P-3 / #11 CDSP settings | 0 | 0 | 0 | 0 |
| 13 SLTI | Related to CXA2150P-3 / #12 LTIV settings | 0 | 0 | 0 | 0 |
| 14 SCTL | Related to CXA2150P-3 / #14 CTLV settings | 0 | 0 | 0 | 0 |
| 15 SVML | Related to CXA2150P-3 / #1 UVML settings | 0 | 0 | 0 | 0 |
| 16 SVMC | Related to CXA2150P-3 / #3 VMCR settings | 0 | 1 | 2 | 3 |

SNNR data is used for the () offset setting.

SNNR data is used for the direct setting.

SNNR data is used for the () offset setting.

SNNR data is used for the () offset setting.

ID-1 Detection

| Reg.No. & Name | FUNCTION | |
|----------------|---|---|
| 0 XGLK | XGLK: Setting for memorizing or not the ID-1 detection status | 0 |
| 1 LINT | LINT: Setting for the multi-single-line ID-1 detection | 0 |

Closed Caption Display & Parental Control (CCD&VCHIP)

| Reg.No. & Name | FUNCTION | |
|----------------|---|----|
| 0 HPRM | Horizontal position of CCD (Main) | 49 |
| 1 HPRS | Horizontal position of CCD (Sub) | 49 |
| 2 RND | OSD rounding control | 1 |
| 3 CCDI | Interpretation control | 3 |
| 4 CRIP | CRI count & parity count | 4 |
| 5 CRIT | Charge/Discharge timing control for slave voltage level | 0 |
| 6 CHMK | Horizontal mask width | 42 |
| 7 FPOL | Field polarity selection | 1 |
| 8 LANG | | 0 |
| 9 DATA | Switch for CCD service/test data | 0 |
| 10 VCHIP | Selection of Vchip controls | 1 |

OPTIONS

| Reg.No. & Name | FUNCTION | |
|----------------|--------------------------------------|-----|
| 0 DLY1 | Power-On to RLY timing = DLY1 x 50ms | 2 |
| 1 DLY2 | Power-On Mute timing = DLY2 x 50ms | 12 |
| 2 DLY3 | Relay-On to start Bus communication | 12 |
| 3 AGC | | 255 |
| 4 PCMX | | 63 |
| 5 BRMX | | 63 |
| 6 RAMW | | 0 |

ID

| Reg.No. & Name | FUNCTION | |
|----------------|---|-----|
| 0 ID0 | Selection of OSD languages & color system | 89 |
| 1 ID1 | Selection of composite & s-video inputs | 127 |
| 2 ID2 | Selection of audio-related controls | 239 |
| 3 ID3 | Selection of basic system settings | 98 |
| 4 ID4 | Selection of basic system settings | 203 |
| 5 ID5 | Selection of advanced system settings | 177 |
| 6 ID6 | Selection of sub picture related settings | 54 |
| 7 ID7 | Selection of some reserved settings | 24 |

PJ Engine

| ITEM No. | ITEM Name | Contents | min | max | init (4:3) | Normal | V.Comp | HD |
|----------|-----------|---|------|------|------------|--------|--------|-----|
| 0 | FDIS | Switch of display for fine adjustment data | 0 | 1 | | | | |
| 1 | COPY | Service copy adjustment | 0 | 1 | | | | |
| 2 | ALCP | Service all copy adjustment | 0 | 1 | | | | |
| 3 | OSDH | Odd horizontal position of PJED service menu | 0 | 1 | 22 | | | |
| 4 | OSDV | Odd vertical position of PJED service menu | 1 | 255 | 100 | 100 | 100 | 100 |
| 5 | FVSL | Start position of fine adjustment | 0 | 15 | 0 | 1 | 1 | 1 |
| 6 | FVSP | Start line of fine adjustment | 0 | 255 | 3 | 25 | 73 | |
| 7 | VIDL | Value of V1 delay | 0 | 255 | 1 | 1 | 1 | 1 |
| 8 | VICU | Value of V1 count up | 0 | 255 | 454 | 337 | 292 | |
| 9 | VIOH | Value of V1 offset upper data | 0 | 4095 | 5 | 134 | 185 | |
| 10 | VLOL | Value of V1 offset lower data | 0 | 255 | 0 | 0 | 0 | 0 |
| 11 | QEVF | Odd/Even select position | 0 | 4095 | | | 1056 | |
| 12 | COHP | Horizontal phase for rough adjustment | 0 | 4095 | | | 0 | |
| 13 | 3ACS | Start center clamp position of H3 and H4 pulse | 0 | 31 | | | 14 | |
| 14 | 3ACW | Width center clamp position of H3 and H4 pulse | 0 | 31 | 0 | 0 | 0 | 0 |
| 15 | FHPH | Horizontal phase for fine adjustment | 0 | 4095 | 1082 | | | |
| 16 | TPHP | Horizontal phase for test pattern | 0 | 4095 | | | 66 | |
| 17 | TPVP | Vertical phase for test pattern | 0 | 255 | 55 | 53 | 17 | |
| 18 | DPHP | Horizontal phase for dynamic focus | 0 | 4095 | | | 270 | |
| 19 | DPHG | Value of horizontal parabola wave for dynamic focus | -128 | 127 | -65 | -65 | -65 | -65 |
| 20 | DPVG | Value of vertical parabola wave for dynamic focus | -128 | 127 | -90 | -90 | -90 | -90 |
| 21 | DPFC | Value of center for dynamic focus | -128 | 127 | 127 | 127 | 127 | 127 |
| 22 | DPV1 | Value of V1 saw wave for dynamic focus | -128 | 127 | -50 | -50 | -50 | -50 |
| 23 | SDHP | Compensation of horizontal phase for shading | 0 | 4095 | | | 444 | |
| 24 | SDH1 | Value of horizontal saw wave for dynamic focus | -128 | 127 | 63 | 127 | 127 | 127 |
| 25 | RVCS | Start position of Red vertical clamp | 0 | 31 | | | 0 | |
| 26 | RVCW | Width of Red vertical clamp | 0 | 31 | 0 | 0 | 0 | 0 |
| 27 | GVCS | Start position of Green vertical clamp | 0 | 31 | 0 | 0 | 0 | 0 |
| 28 | GVCW | Width of Green vertical clamp | 0 | 31 | 0 | 0 | 0 | 0 |
| 29 | BVCS | Start position of Blue vertical clamp | 0 | 31 | 0 | 0 | 0 | 0 |
| 30 | BVCW | Width of Blue vertical clamp | 0 | 31 | 0 | 0 | 0 | 0 |
| 31 | RHCS | Start position of Red horizontal clamp | 0 | 31 | 0 | 0 | 0 | 0 |
| 32 | RHCW | Width of Red horizontal clamp | 0 | 31 | 0 | 0 | 0 | 0 |

PJ Engine

| ITEM No. | ITEM Name | Contents | min | max | init (4:3) | Normal | V.Comp | HD |
|----------|-----------|---|-----|------|-------------------------|--------|--------|----|
| 67 | VLOM | Auto Regi. Pattern Lower middle vertical position | 0 | 2047 | | | 0 | |
| 68 | VLOW | Auto Regi. Pattern Lower vertical position | 0 | 2047 | 43:975 53:975 61:975 | | | |
| 69 | HLB | Auto Regi. Pattern left horizontal position | 0 | 4095 | 43:85 53:85 61:85 | | | |
| 70 | HLBM | Auto Regi. Pattern left middle horizontal position | 0 | 4095 | | | 0 | |
| 71 | HMD | Auto Regi. Pattern middle horizontal position | 0 | 4095 | 43:685 53:685 61:685 | | | |
| 72 | HRM | Auto Regi. Pattern right middle horizontal position | 0 | 4095 | | | 0 | |
| 73 | HRV | Auto Regi. Pattern right horizontal position | 0 | 4095 | 43:1215 53:1215 61:1215 | | | |
| 74 | SFTF | Switch of shift fast | 0 | 1 | | | 0 | |
| 75 | ACTL | Account timer counter lower byte | 0 | - | | | 0 | |
| 76 | ACTH | Account timer counter upper byte | 0 | - | | | 0 | |
| 77 | SLSW | Auto Regi. adjustment item select | 0 | 3 | 43:0 53:0 61:0 | | | |

| | | | min | max | init (4:3) | Blue | Green | Red |
|----|------|--|------|-----|------------|---------------|---------------|---------------|
| 78 | CENT | | -512 | 511 | | ADJ -35, -20 | ADJ +35, +20 | ADJ +35, +20 |
| 79 | SKEW | | -512 | 511 | | ADJ 0, 0 | ADJ 0, 0 | ADJ 0, 0 |
| 80 | SIZE | | -512 | 511 | | ADJ -100, -75 | ADJ -100, -75 | ADJ -100, -75 |
| 81 | LIN | | -512 | 511 | | ADJ 0, 0 | ADJ -410, 0 | ADJ 410, 0 |
| 82 | KEY | | -512 | 511 | | ADJ x 0 | ADJ x -120 | ADJ x 120 |
| 83 | PIN | | -512 | 511 | | ADJ 0, 320 | ADJ 0, 300 | ADJ 0, 300 |
| 84 | MLIN | | -512 | 511 | | ADJ 0, x | ADJ 145, x | ADJ -145, x |
| 85 | MSIZ | | -512 | 511 | | ADJ 0, x | ADJ 100, x | ADJ 100, x |

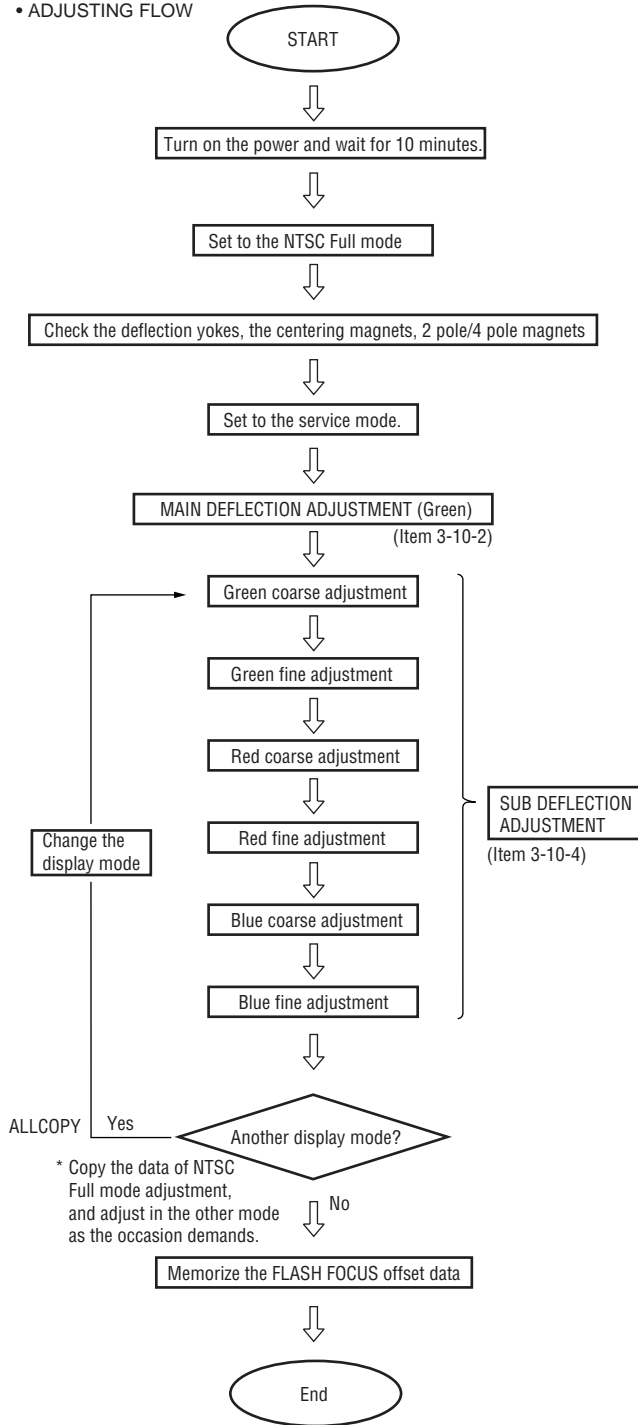
Note: 4:3 has Normal, V.Comp, HD separately

PJ Engine

| ITEM No. | ITEM Name | Contents | min | max | init (4:3) | Normal | V.Comp | HD |
|----------|-----------|---|------|------|----------------------|--------|--------|----|
| 33 | GHCS | Start position of Green horizontal clamp | 0 | 31 | | | 0 | |
| 34 | GHCW | Width of Green horizontal clamp | 0 | 31 | 0 | | 0 | |
| 35 | BHCS | Start position of Blue horizontal clamp | 0 | 31 | 0 | | 0 | |
| 36 | BHCW | Width of Blue horizontal clamp | 0 | 31 | 0 | | 0 | |
| 37 | BDVU | Vertical position for border line 1 | 0 | 2047 | 23 | 1 | 1 | 1 |
| 38 | BDVL | Vertical position for border line 2 | 0 | 2047 | 905 | 1079 | | |
| 39 | BDHL | Horizontal position for border line 1 | 0 | 2047 | | 148 | | |
| 40 | BDHR | Horizontal position for border line 2 | 0 | 2047 | | 1262 | | |
| 41 | HBLD | Horizontal phase for output of HBlank out | 0 | 4095 | | | 0 | |
| 42 | HBLW | Width for output of HBlank out | 0 | 4095 | | | 0 | |
| 43 | PWM2 | PWM2 output width setting of Regi IC | 0 | 4095 | 43:500 53:345 61:600 | | | |
| 44 | COGV | Green vertical center offset data for Auto Regi. | -128 | 127 | | | - | |
| 45 | COBV | Red vertical center offset data for Auto Regi. | -128 | 127 | | | - | |
| 46 | COBV | Blue vertical center offset data for Auto Regi. | -128 | 127 | | | - | |
| 47 | COGH | Green horizontal center offset data for Auto Regi. | -128 | 127 | | | - | |
| 48 | COBH | Red horizontal center offset data for Auto Regi. | -128 | 127 | | | - | |
| 49 | COBH | Blue horizontal center offset data for Auto Regi. | -128 | 127 | | | - | |
| 50 | SOGV | Green vertical skew offset data for Auto Regi. | -128 | 127 | | | - | |
| 51 | SORV | Red vertical skew offset data for Auto Regi. | -128 | 127 | | | - | |
| 52 | SORV | Blue vertical skew offset data for Auto Regi. | -128 | 127 | | | - | |
| 53 | SOCH | Green horizontal skew offset data for Auto Regi. | -128 | 127 | | | - | |
| 54 | SORH | Red horizontal skew offset data for Auto Regi. | -128 | 127 | | | - | |
| 55 | SOBH | Blue horizontal skew offset data for Auto Regi. | -128 | 127 | | | - | |
| 56 | ZOCH | Green horizontal size offset data for Auto Regi. | -128 | 127 | | | - | |
| 57 | ZORH | Red horizontal size offset data for Auto Regi. | -128 | 127 | | | - | |
| 58 | ZOBH | Blue horizontal size offset data for Auto Regi. | -128 | 127 | | | - | |
| 59 | LOGH | Green horizontal linearity offset data for Auto Regi. | -128 | 127 | | | - | |
| 60 | LORH | Red horizontal linearity offset data for Auto Regi. | -128 | 127 | | | - | |
| 61 | LOBH | Blue horizontal linearity offset data for Auto Regi. | -128 | 127 | | | - | |
| 62 | ERR | Auto Regi. Error code | 0 | - | | | - | |
| 63 | ADTM | A/D data input timing of Auto Regi. | 0 | 127 | 43:134 53:134 61:134 | | | |
| 64 | VUP | Auto Regi. Pattern Upper vertical position | 0 | 2047 | 43:50 53:50 61:50 | | | |
| 65 | VUPM | Auto Regi. Pattern Upper middle vertical position | 0 | 2047 | | | 0 | |
| 66 | VMID | Auto Regi. Pattern Middle vertical position | 0 | 2047 | 43:510 53:510 61:510 | | | |

3-11. REGISTRATION ADJUSTMENT

• ADJUSTING FLOW

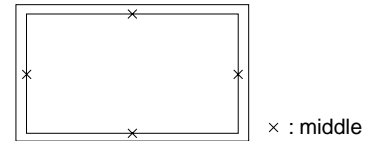


3-11-1. Setup for Adjustment

1. Marking

- At the 4 insides of the screen, locate the middle. Use a tape measure to identify the middle.

2. Data Setting



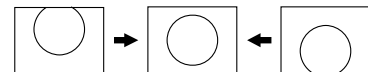
- Set NTSC Full mode.
- Enter the Service mode, and select “PJE”.

3-11-2. Main Deflection Adjustment

Note : Before this adjustment, input the data of PJE item No. 78-85, (See page 24).

- Place the caps on the red and blue lenses so that only the green color is displayed.
- Enter the monoscope signal and set to NTSC Full mode .
- Enter the Service mode, and select “2150D-1” .
- Adjust “0 VPOS” and “1 VSIZ” so that the picture is displayed in the center of screen.

0 VPOS



1 V-Size



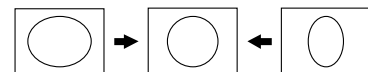
- Select “2150D-2” and adjust “2 H-Size” so that the picture size is within the specification.

SPEC

Overscan Spec. = 9%

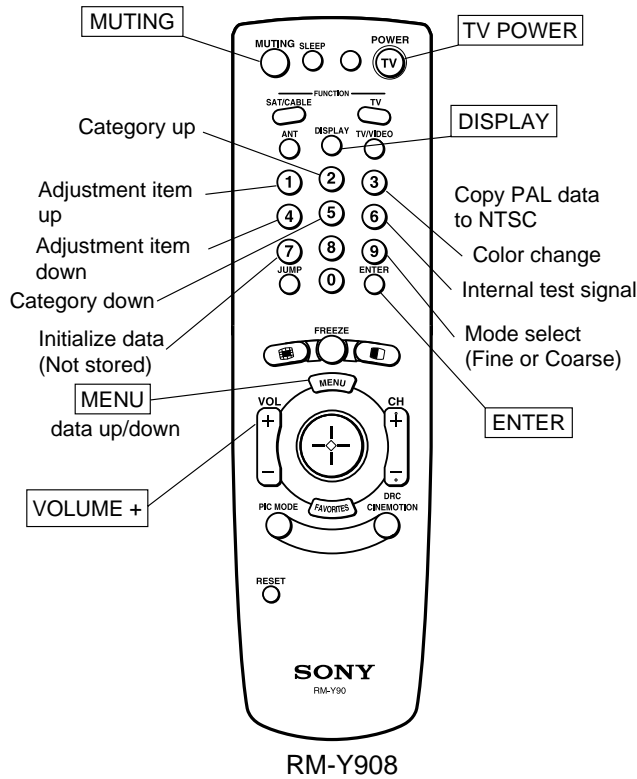
| Input Signal | H SIZE | V SIZE |
|--------------|----------------|----------------|
| Monoscope | 15.6 ± 0.2 sq. | 11.5 ± 0.2 sq. |

2 H-Size



- Copy the data of NTSC Full mode to the other display mode and adjust in the other mode as the occasion demands.

3-11-3. Operation Method for Projector Engine Mode



1. Functions of Keys on Commander

- ① : Changes adjustment item. (item No. moves up)
: Marker moves clockwise from center to outside. (in fine adjustment mode)
- ④ : Changes adjustment item. (item No. moves down)
: Marker moves counterclockwise from outside to center. (in fine adjustment mode)
- ② : Changes adjustment category. (category No. moves up)
- ⑤ : Changes adjustment category. (category No. moves down)
- Joystick : Changes data value. (up or down)
: Marker moves up, down, or to the left or right. (in fine adjustment mode)
- ③ : Changes adjustment color.
GRN → BLU → RED
- ⑥ : Displays or changes internal test signals.
: crosshatch + external signal → crosshatch + borderline → crosshatch only → dot only → off
- ⑨ : Switches adjustment mode.
Coarse adjustment mode → fine adjustment mode

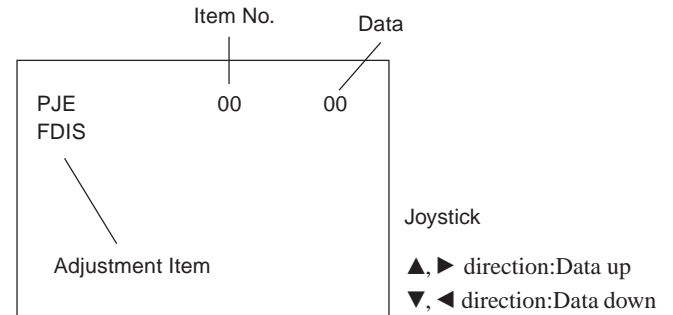
- Press joy : Switches marker moving method.
stick (in fine adjustment mode)
joystick (▲, ▼, ◀, ▶) keys → ① and ④ buttons

Commander Function

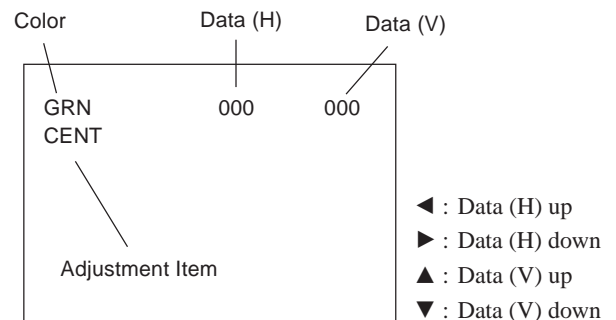
| Buttons | Mode | Description |
|--------------|-------------|---|
| ① + ENTER | READ | Writes data to NVM. |
| MUTING+ENTER | WRITE | Reads data from NVM. |
| ⑦ + ENTER | PJE INITIAL | Service data initialization. Not stored. (Be sure not to use usually) |

2. Operation Method for Coarse Adjustment

- 1) Enter the Service mode, and select "PJE".
- 2) Press "①" or "④" button on the commander to select the item, and use the joystick to change the data.



- 3) Select "GRN CENT". When BLU or RED is displayed, press "③" button on the commander to change the adjustment color in the order of GRN → BLU → RED.
- 4) In the GRN, BLU, or RED mode, move ▲, ▼ direction the joystick can change the data in vertical direction, or ◀, ▶ direction in horizontal direction.

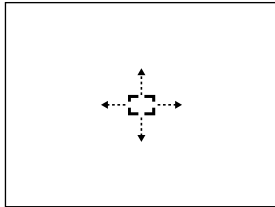


- 5) Before returning to the Service mode, press "MUTING" + "ENTER" buttons on the commander to write the data. (Omission of this operation causes the set data to be returned to the data before adjustment)

3. Operation Method for Fine Adjustment

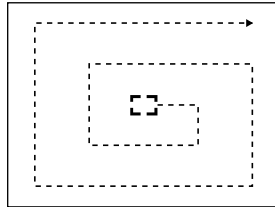
- 1) Select the PJE mode.
- 2) Select FDIS so that the data at each position can be displayed in the fine adjustment mode, and set the data to "01".
- 3) Press "⑨" button on the commander, and the fine adjustment mode will be active where a green marker appears in the center of screen (in the case of GRN mode).
- 4) Press joystick, and the marker color will be switched between green (GRN mode) and white alternately.
- 5) Use "①" or "④" button on the commander, or the joystick to move the marker to the position to be adjusted, where fine adjustment can be made.

- When marker color is white.
(in this case, fine adjustment is disabled)



Operating the joystick can move the marker up, down, or to the left or right freely.

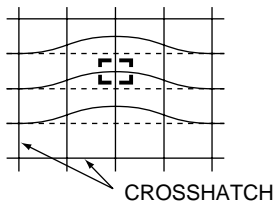
- When marker color is green. (GRN mode)



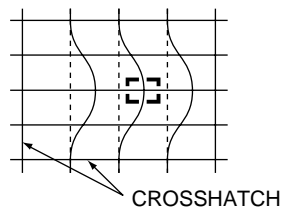
- ① : moves the marker clockwise from center to outside.
- ④ : moves the marker counterclockwise from outside to center.

- Fine adjustment can be made on the basis of marker position using ▲, ▼, ◀, ▶ direction of the joystick.

Move joystick ▲ direction



Move joystick ▶ direction



- 6) Press "⑨" button on the commander to return to the coarse adjustment mode.

3-11-4. PJE Adjustment (Sub Deflection Adjustment)

Adjustment ○ : Yes – : No

| Adjustment Item | Adjustment Type | | |
|-----------------|-----------------|-------|-------|
| | GRN | RED | BLU |
| | H / V | H / V | H / V |
| CENT | ○ / ○ | ○ / ○ | ○ / ○ |
| SKEW | ○ / ○ | ○ / ○ | ○ / ○ |
| SIZE | ○ / ○ | ○ / ○ | ○ / ○ |
| LIN | ○ / ○ | ○ / ○ | ○ / ○ |
| KEY | – / ○ | – / ○ | – / ○ |
| PIN | ○ / ○ | ○ / ○ | ○ / ○ |
| MLIN | ○ / – | ○ / – | ○ / – |
| MSIZ | ○ / – | ○ / – | ○ / – |

Note: If the value of over the limit value, adjust these in the fine adjustment .

Coarse Data Limit Value.

Cent H 35±170 V 20±170, Size H-75max, Lin H Blu -425min, H Red 425max.

<Adjustment for NTSC Full Mode>

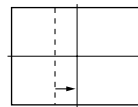
- The adjustment should be done in the numerical order given.

1. Green Adjustment

- 1) Place the caps on the red and blue lenses so that only the green color is displayed.
- 2) Enter the monoscope signal to set.
- 3) Select the PJE mode.
- 4) Press "⑥" button on the commander to display internal test signal (crosshatch).
- 5) Select "GRN CENT", and adjust so that the picture coincide in the center of screen.

- GRN CENT (horizontally/vertically)

Push the joystick to ▶



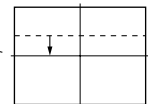
Push the joystick to ◀



Push the joystick to ▲

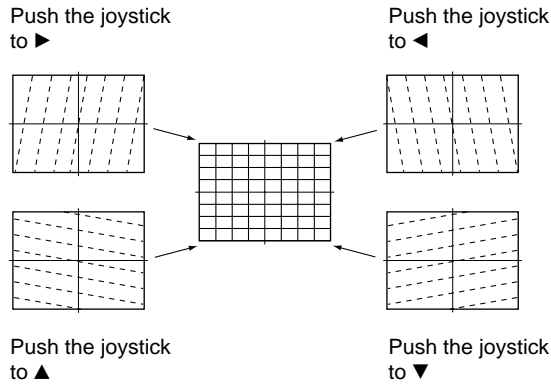


Push the joystick to ▼



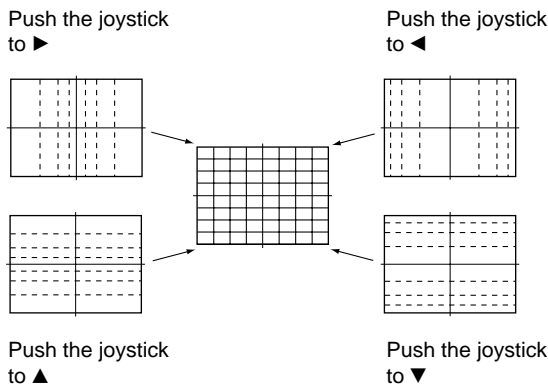
- 7) Select “GRN SKEW”, and correct the tilt of horizontal lines and vertical lines.

• GRN SKEW (horizontally/vertically)



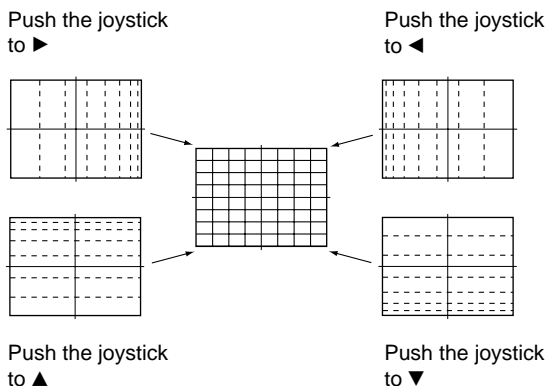
- 8) Select “GRN SIZE”, and adjust so that each distance from center to left end and to right end is equal. Adjust so that each distance from center to top and to bottom is equal.

• GRN SIZE (horizontally/vertically)



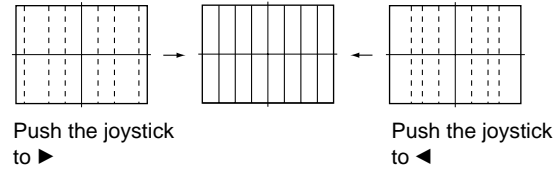
- 9) Select “GRN LIN”, and adjust so that each space at the right end and at the left end of screen is equal. Adjust so that each space at the top and at the bottom of screen is equal.

• GRN LIN (horizontally/vertically)



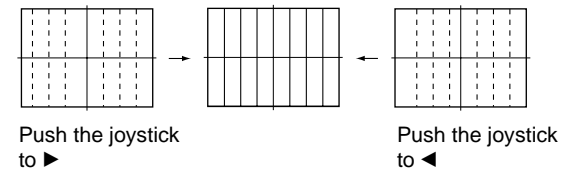
- 10) Select “GRN MSIZ”, and correct the space intervals for the horizontal section of the screen are equal.

• GRN MSIZ (horizontally)



- 11) Select “GRN MLIN”, and correct the sizes of the horizontal line at the center of the screen are symmetrical left and right.

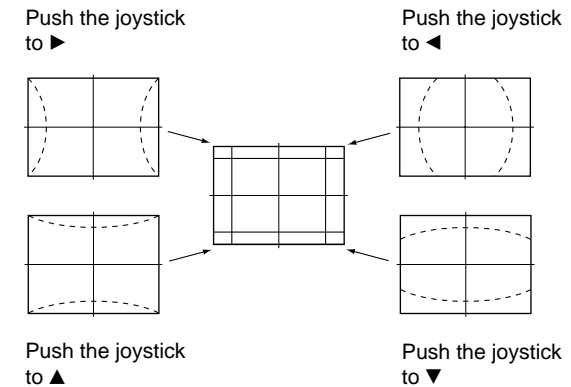
• GRN MLIN (horizontally)



Note: The SIZE and LIN, MSIZ and MLIN adjustments are affected each other.
So adjust these mutually if necessary.

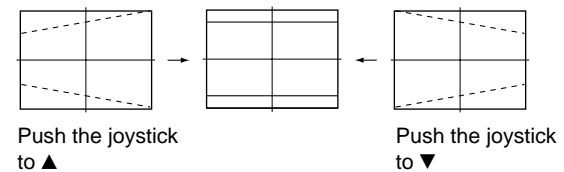
- 12) Select “GRN PIN”, and adjust so that right and left vertical lines on the screen become straight. Adjust so that upper and lower horizontal lines on the screen become straight.

• GRN PIN (horizontally/vertically)



- 13) Select “GRN KEY”, and adjust so that upper and lower horizontal lines on the screen become parallel.

• GRN KEY (vertically)



Note: The VPIN and KEY adjustments are affected each other.
So adjust these mutually if necessary.

- 14) Press “⑨” button on the commander to enter the fine adjustment mode.
- 15) Make fine adjustment so that horizontal lines and vertical lines become straight.
- 16) Press “⑨” button on the commander to return to the coarse adjustment mode.

2. Red Adjustment

- 1) Place a cap on the blue lens so that green and red colors are displayed.
- 2) Press “③” button on the commander to select RED mode.
- 3) Adjust the following items so that red lines overlap with green lines.

- RED CENT (horizontally/vertically)
- RED SKEW (horizontally/vertically)
- RED SIZE (horizontally/vertically)
- RED LIN (horizontally/vertically)
- RED MSIZ (horizontally)
- RED MLIN (horizontally)
- RED PIN (horizontally/vertically)
- RED KEY (vertically)

- 4) Press “⑨” button on the commander to enter the fine adjustment mode.
- 5) Make fine adjustment so that horizontal lines and vertical lines overlap with green lines.
- 6) Press “⑨” button on the commander to return to the coarse adjustment mode.

3. Blue Adjustment

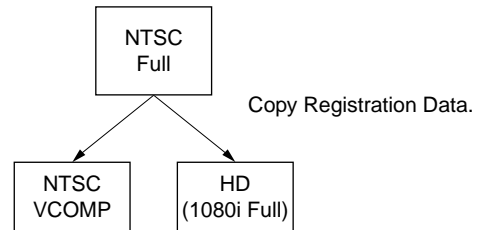
- 1) All colors are displayed.
- 2) Press “③” button on the commander to select BLU mode.
- 3) Hereinafter, use same manner as that of red adjustment to adjust so that the blue lines overlap with green and red lines.

4. Registration Data Writing

- 1) After each adjustment of green, blue, and red for the NTSC Full mode finished, press “MUTING”+ “ENTER” buttons on the commander to write registration data to the NVM.

<Copy All Registration Data to Other modes>

1. Make sure that the adjustment for NTSC Full mode finished and the data have already been written.
2. Select the PJE mode.
3. Select ALCP and set the data to “01”, and press “MUTING”+“ENTER” buttons on the commander.
4. The data of NTSC Full mode are copied to all other modes.



5. Check in the other mode and adjust as the occasion demands. Be sure to write data in each mode.

3-12. AUTO CONVERGENCE OFFSET

This adjustment must be performed after the registration adjustment was made or after readjustment was made by any reason.

1. Darken the periphery of this set.
2. Enter the monoscope signal to set the NTSC Full mode.
3. Select the PJE mode.
4. Press “FLASH FOCUS” button on the front panel of the set. (The offset value is now automatically stored)
5. Select “ERR” of PJE mode. Confirm ERR is “00”. If ERR is not “00”, recheck. (Refer to 3-12.)
6. Exit the service mode.

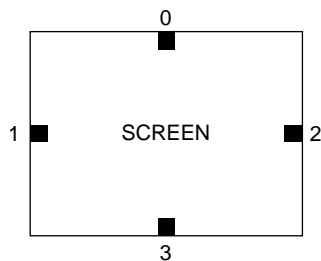
3-13. AUTO REGISTRATION ERROR CODE LIST

If an error code is displayed after the set has been fully adjusted, correctly, please check the following items : position, tilt and sizing. If either of these adjustments are off, even slightly, the auto registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns is being flashed on the screen for the sensor to read. Therefore, auto registration (called auto convergence) cannot operate properly causing an error code to be displayed. In order for this function to operate properly, correct position, tilt and size must be adjusted properly.

ERROR CODE LIST

| ERROR CODE | DESCRIPTION | REMEDY |
|------------|---|--|
| 00 | No Error | |
| 10 | Sensor 0 low output | Check sensor 0, connection/wiring, circuit, and pattern position (Is pattern over sensor ?) Adjust "64 VUP" if necessary. |
| 11 | Sensor 1 low output | Check sensor 1, connection/wiring, circuit, and pattern position (Is pattern over sensor ?) Adjust "69 HLB" if necessary. |
| 12 | Sensor 2 low output | Check sensor 2, connection/wiring, circuit, and pattern position (Is pattern over sensor ?) Adjust "73 HRIV" if necessary. |
| 13 | Sensor 3 low output | Check sensor 3, connection/wiring, circuit, and pattern position (Is pattern over sensor ?) Adjust "68 VLOW" if necessary. |
| 20 | Sensor 0 high output | Check sensor 0 and circuit. |
| 21 | Sensor 1 high output | Check sensor 1 and circuit. |
| 22 | Sensor 2 high output | Check sensor 2 and circuit. |
| 23 | Sensor 3 high output | Check sensor 3 and circuit. |
| 30 | V CENT or SKEW adjustment loop overflow | Check "66 VMID" data and check registration condition. |
| 31 | H CENT or SKEW adjustment loop overflow | Check "71 HMID" data and check registration condition. |
| 32 | H LIN or SIZE adjustment loop overflow | Check "71 HMID" data and check registration condition. |
| 40 | V CENT regi data overflow | Check "66 VMID" data and confirm V CENT data (all mode) is not near 511. |
| 41 | H CENT regi data overflow | Check "71 HMID" data and confirm H CENT data (all mode) is not near 511. |
| 42 | V SKEW regi data overflow | Check "66 VMID" data and confirm V SKEW data (all mode) is not near 511. |
| 43 | H SKEW regi data overflow | Check "71 HMID" data and confirm H SKEW data (all mode) is not near 511. |
| 44 | H LIN regi data overflow | Check "71 HMID" data and confirm H CENT data (all mode) is not near 511. |
| 45 | H SIZE regi data overflow | Check "71 HMID" data and confirm H CENT data (all mode) is not near 511. |
| 50 | V CENT regi data overdraw | Check "66 VMID" data and confirm V CENT data (all mode) is not near -512. |
| 51 | H CENT regi data overdraw | Check "71 HMID" data and confirm H CENT data (all mode) is not near -512. |
| 52 | V SKEW regi data overdraw | Check "66 VMID" data and confirm V SKEW data (all mode) is not near -512. |
| 53 | H SKEW regi data overdraw | Check "71 HMID" data and confirm H SKEW data (all mode) is not near -512. |
| 54 | H LIN regi data overdraw | Check "71 HMID" data and confirm H CENT data (all mode) is not near -512. |
| 55 | H SIZE regi data overdraw | Check "71 HMID" data and confirm H CENT data (all mode) is not near -512. |
| 60 | H or V CENT offset overflow | Check "71 HMID" data and check "66 VMID" data. |
| 61 | H or V SKEW offset overflow | Check SKEW adjustment. |
| 62 | H SIZE or LIN offset overflow | Check "71 HMID" data, check "66 VMID" data and check SIZE and LIN adjustment. |
| 70 | H or V CENT offset overdraw | Check "71 HMID" data and check "66 VMID" data. |
| 71 | H or V SKEW offset overdraw | Check SKEW adjustment. |
| 72 | H SIZE or LIN offset overdraw | Check "69 HLB" data, check "73 HRIV" data and check SIZE and LIN adjustment. |
| 80 | SIZE limit error | Check that H SIZE is negative and not near zero. |

[SENSOR POSITION]

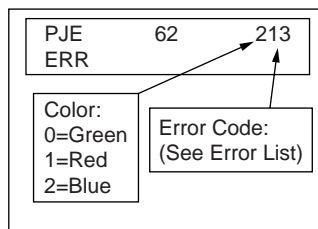


0 : UPPER SENSOR
1 : LEFT SENSOR
2 : RIGHT SENSOR
3 : LOWER SENSOR

Error codes in normal (customer) mode are not displayed. You must enter PJED service mode to see to the error code.

AUTO REGI ERROR CODE FORMAT

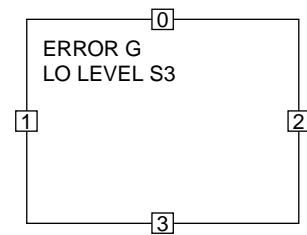
ERROR EXAMPLE



Example: Blue low Level Sensor 3
0-Green
1-Red
2-Blue

When executing flash focus in service mode, the error will be displayed in text format (see below).

SENSOR POSITIONS



SECTION 4

CIRCUIT ADJUSTMENTS

4-1. P & P SUB CONTRAST ADJUSTMENT (VIDEO) (SCON)

1. Receive the signal.
TV terminal (sub) : no signal
VIDEO terminal (main) : color-bar signal
2. VIDEO MODE : Pro
PICTURE : maximum
COLOR : minimum
RGB Signal : off
3. Set to P & P mode, and set to service mode.
4. Connect an oscilloscope between pin ③ of CN703 (A board) and ground.
5. Select “ 2103-1-02 ”, and adjust so that the waveform level of VR is $2.00 \pm 0.05V_{p-p}$.
6. Select “ 2103-2-02 ”, and adjust so that the waveform level of VR is $2.00 \pm 0.05V_{p-p}$.
7. Write the data into memory.

MUTING → **ENTER**

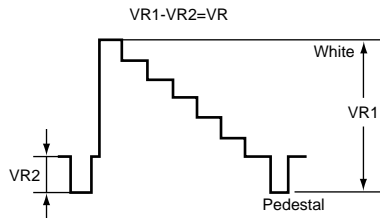


Fig. 4-1

4-2. P & P SUB CONTRAST ADJUSTMENT (RF) (SCON)

1. Receive the signal.
TV terminal (main) : color-bar signal
VIDEO terminal (sub) : no signal
2. VIDEO MODE : Pro
PICTURE : Maximum
COLOR : Minimum
RGB Signal : off
3. Set to P & P mode, and set to service mode.
4. Connect an oscilloscope between pin ③ of CN703 (A board) and ground.
5. Select “ 2103-1-02 ”, and adjust so that the waveform level of VR is $2.00 \pm 0.05V_{p-p}$.
6. Select “ 2103-2-02 ”, and adjust so that the waveform level of VR is $2.00 \pm 0.05V_{p-p}$.
7. Write the data into memory.

MUTING → **ENTER**

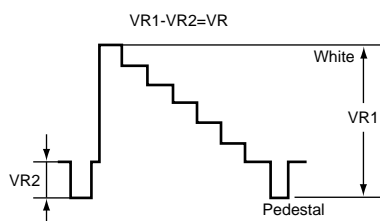


Fig. 4-1

4-3. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (SHUE, SCOL)

1. Receive the signal.
TV terminal (sub) : no signal
VIDEO terminal (main) : color-bar signal
2. VIDEO MODE : Pro
PICTURE : maximum
COLOR : center
HUE : +4 steps
Signal : off
3. Set to P & P mode, set to service mode.
4. Connect an oscilloscope between pin ③ of CN702 (A board) connector and ground.
5. Select “ 2103-1-03 SCOL, -04 SHUE ”, and adjust them to have $VB1 \leq VB4$ and $VB2 \leq VB3$ in the waveform levels.
6. Select “ 2103-2-03 SCOL, -04 SHUE ”, and adjust them to have $VB1 \leq VB4$ and $VB2 \leq VB3$ in the waveform levels.
7. Write the data into memory.

MUTING → **ENTER**

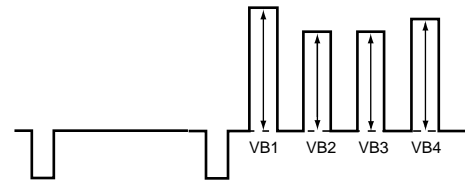


Fig. 4-3

4-4. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (SHUE, SCOL)

1. Receive the signal.
TV terminal (main) : color-bar signal
VIDEO terminal (sub) : no signal
2. VIDEO MODE : Pro
PICTURE : maximum
COLOR : center
HUE : +4 steps
Signal : off
3. Set to P & P mode, set to service mode.
4. Connect an oscilloscope between pin ③ of CN702 (A board) connector and ground.
5. Select “ 2103-1-03 SCOL, -04 SHUE ”, and adjust them to have $VB1 \leq VB4$ and $VB2 \leq VB3$ in the waveform levels.
6. Select “ 2103-2-03 SCOL, -04 SHUE ”, and adjust them to have $VB1 \leq VB4$ and $VB2 \leq VB3$ in the waveform levels.
7. Write the data into memory.

MUTING → **ENTER**

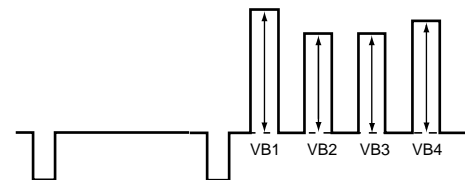


Fig. 4-4

SAFETY RELATED ADJUSTMENTS

[D BOARD]

5-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with ■ on the schematic diagram always check HV regulation, and if necessary re-adjust.

- : VR8001
- : C8079, C8083, C8090, C8129, D8013, D8015, D8038, D8043, IC8006, Q8021, R8055, R8099, R8102, R8128, R8129, R8131, R8139, R8140, R8142, R8153, R8163, R8223, R8230, T8004 (LOT), T8005 (FBT), HV block, D board

OPERATION CHECK

1. Receive the all white signal.
2. Set PIC MAX/BRT CENT.
3. Confirm that the voltage between CN8015 ① PIN and GND is less than 7.80VDC.

HV REGULATION ADJUSTMENT

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Power on the set.
3. Repeat steps 1 and 2 as above.
4. Confirm that the static voltmeter reading is $31.0 \pm 0.4V$.
5. If not, adjust with VR8001 to the specified value.
6. After adjustment, put the VR cover on VR8001 as shown below and apply sufficient amount of epoxy resin around VR8001.

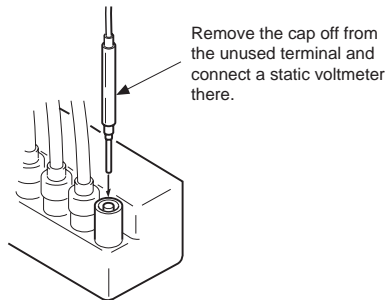


Fig. 4-1

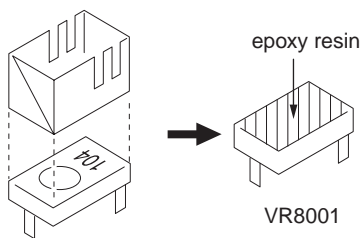


Fig. 4-2

5-2. HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT

When replacing the following components marked with ■ on the schematic diagram always check hold-down voltage and if necessary re-adjust.

- : VR8002
- : C8054, C8086, C8088, C8100, C8104, C8118, C8123, C8124, D8019, D8020, D8022, D8028, D8036, FB8001, IC8008, Q8035, Q8038, R8035, R8043, R8159, R8166, R8171, R8196, R8201, T8004 (LOT), T8005 (FBT), HV block, D board

OPERATION CHECK

1. Receive the dot signal.
2. Set PIC MIN/BRT MIN.
3. Confirm that the voltage between cathode of D8038(JW171) and GND is more than 23.0V DC.
4. Using an external DC Power supply, apply the voltage shown below between cathode of D8038(JW171) on "D" and GND, then confirm that the HV-Prot circuit works.(Raster disappears.)
Apply DC voltage: Less than 29.05V DC.

HV HOLD-DOWN ADJUSTMENT

1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
2. Power on the set.
3. Connet an external 10kΩ VR at CN8015 and adjust this VR so that the high voltage is 34.50kV.
4. Adjust VR8002 to the point that the HV-Prot circuit works (Raster disappears) at $34.50 \pm 0.50kV$ reading on the static voltmeter.
5. After adjustment, put the VR cover on VR8002 and apply sufficient amount of epoxy resin around VR8002 as the same manner for VR8001.

[G BOARD]

5-3. +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC501, R5032.

1. Supply 130VAC to variable autotransformer.
2. Receive dot signal pattern and set the PICTURE and BRIGHTNESS settings to their minimum.
3. Confirm the voltage of TP +B 135V is less than 137.0Vdc.
4. If step 4 not satisfied , replace IC501 and repeat above steps.

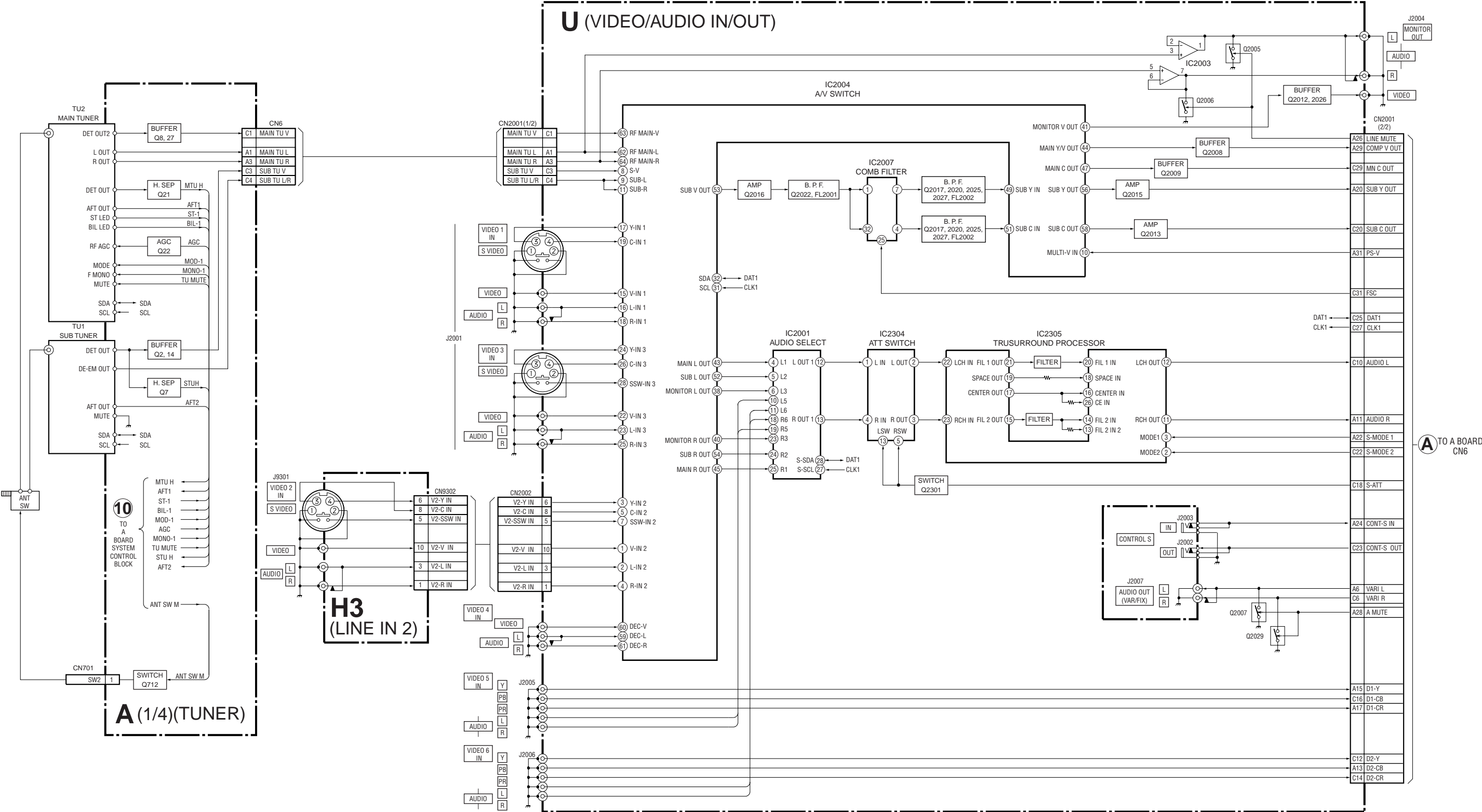
5-4. +B OVP CONFIRMATION

1. Add to low voltage power supply between to TP. 5001 and ground.
2. Supply 120VAC to variable autotransformer.
3. Power on the Set and receive dot signal pattern.
4. Set the PICTURE and BRIGHTNESS settings.
5. Check the OVP is activated.
Operate :less than 2.50V

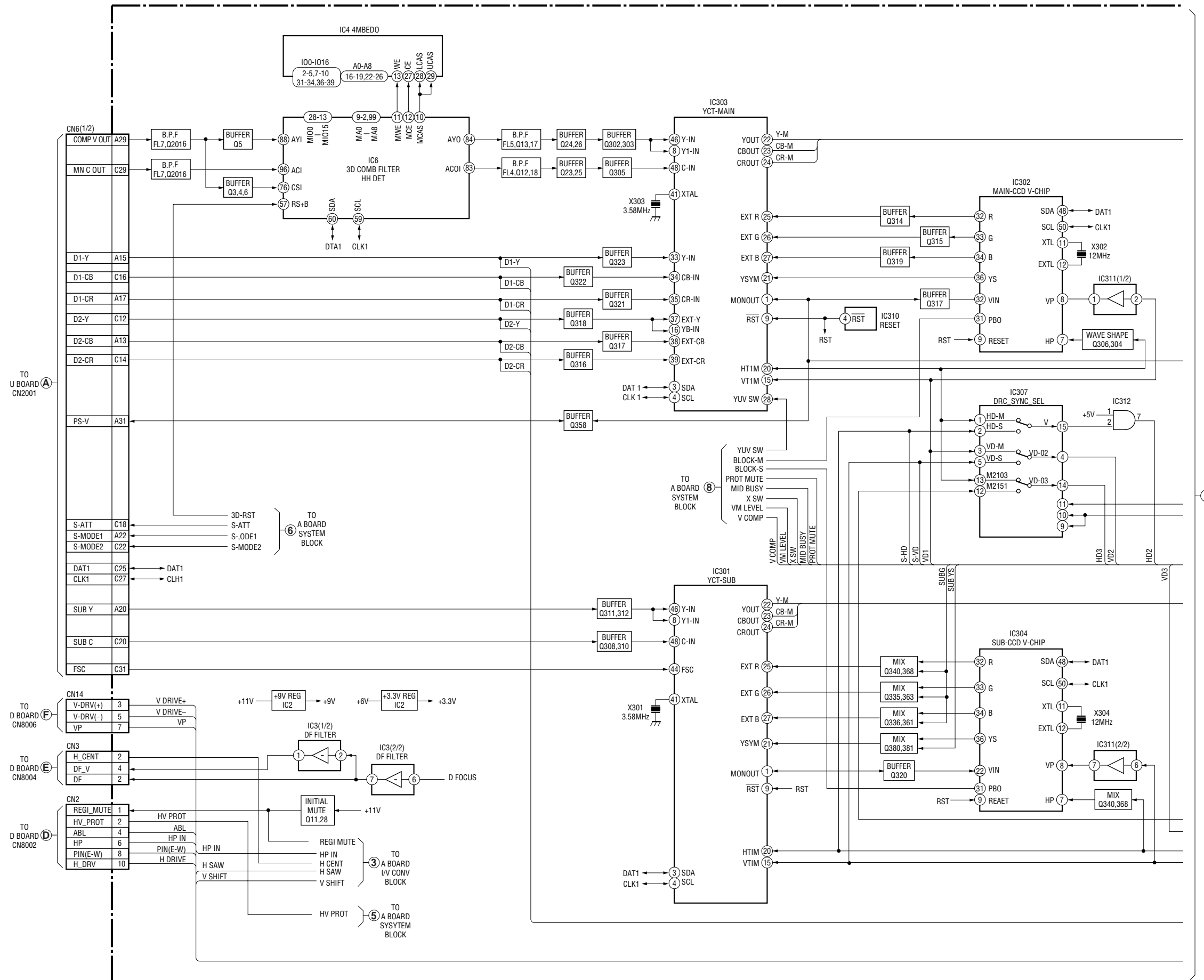
SECTION 6
DIAGRAMS

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

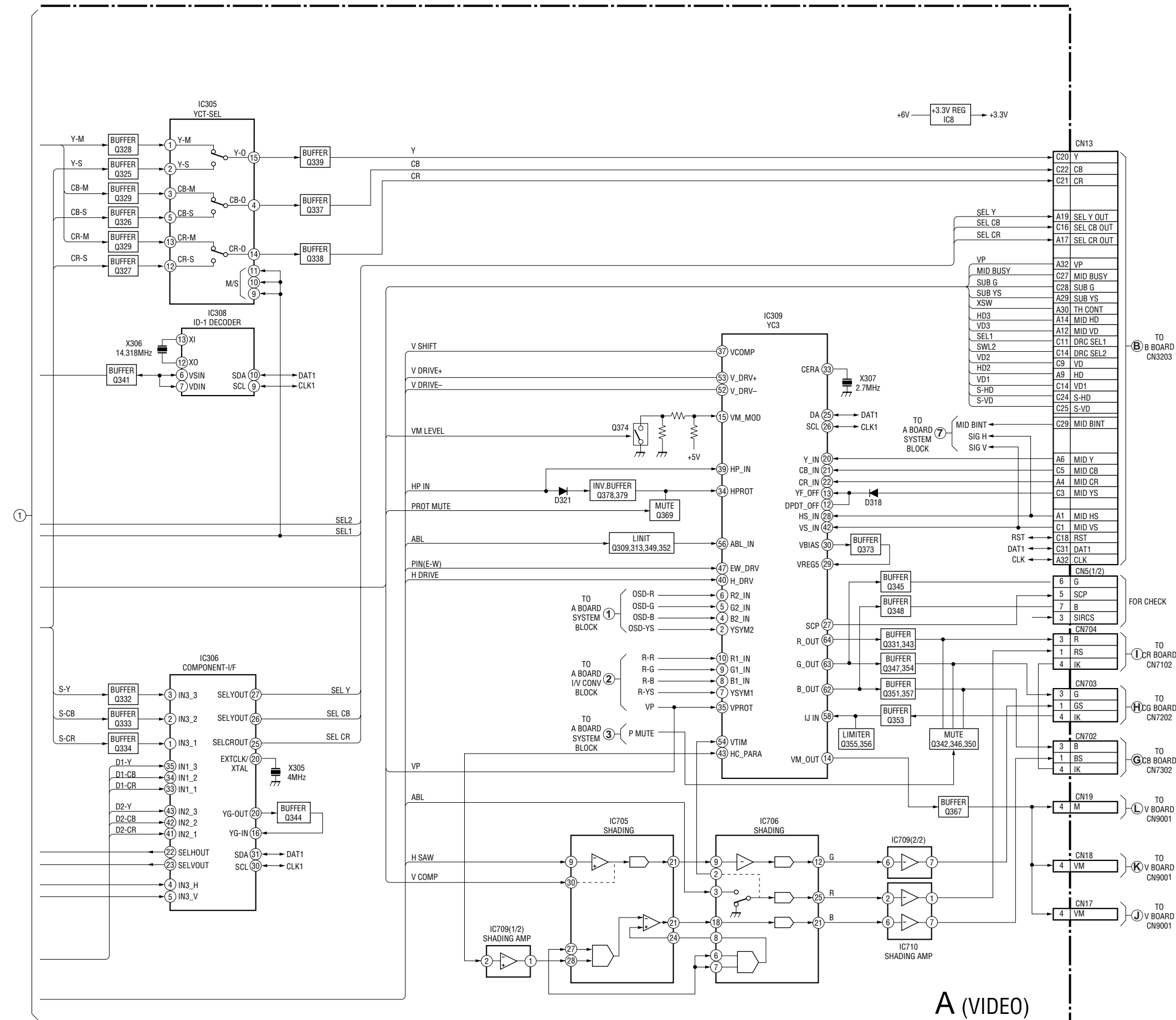
6-1. BLOCK DIAGRAM (1)

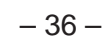


BLOCK DIAGRAM (2)



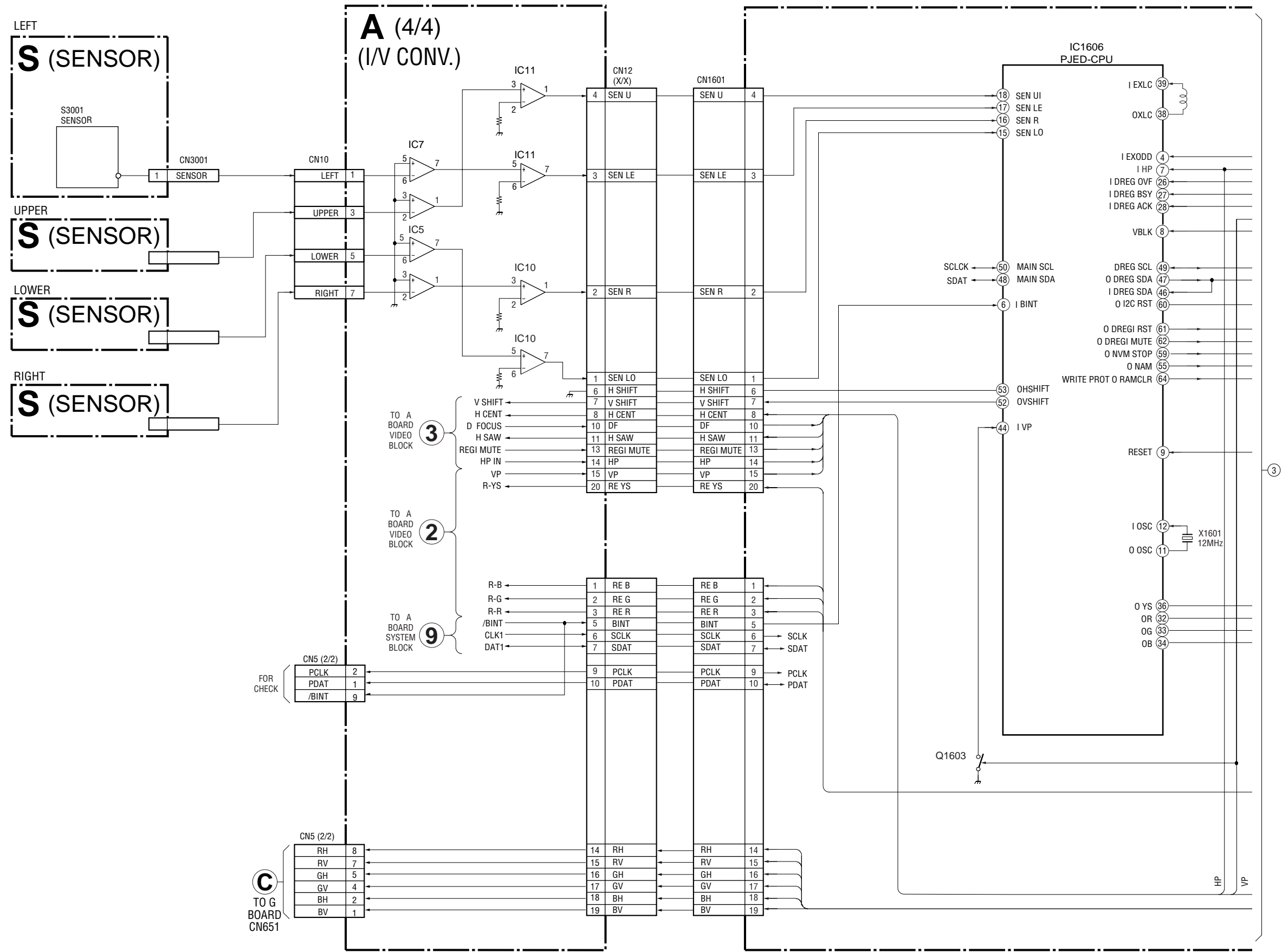
BLOCK DIAGRAM (3)



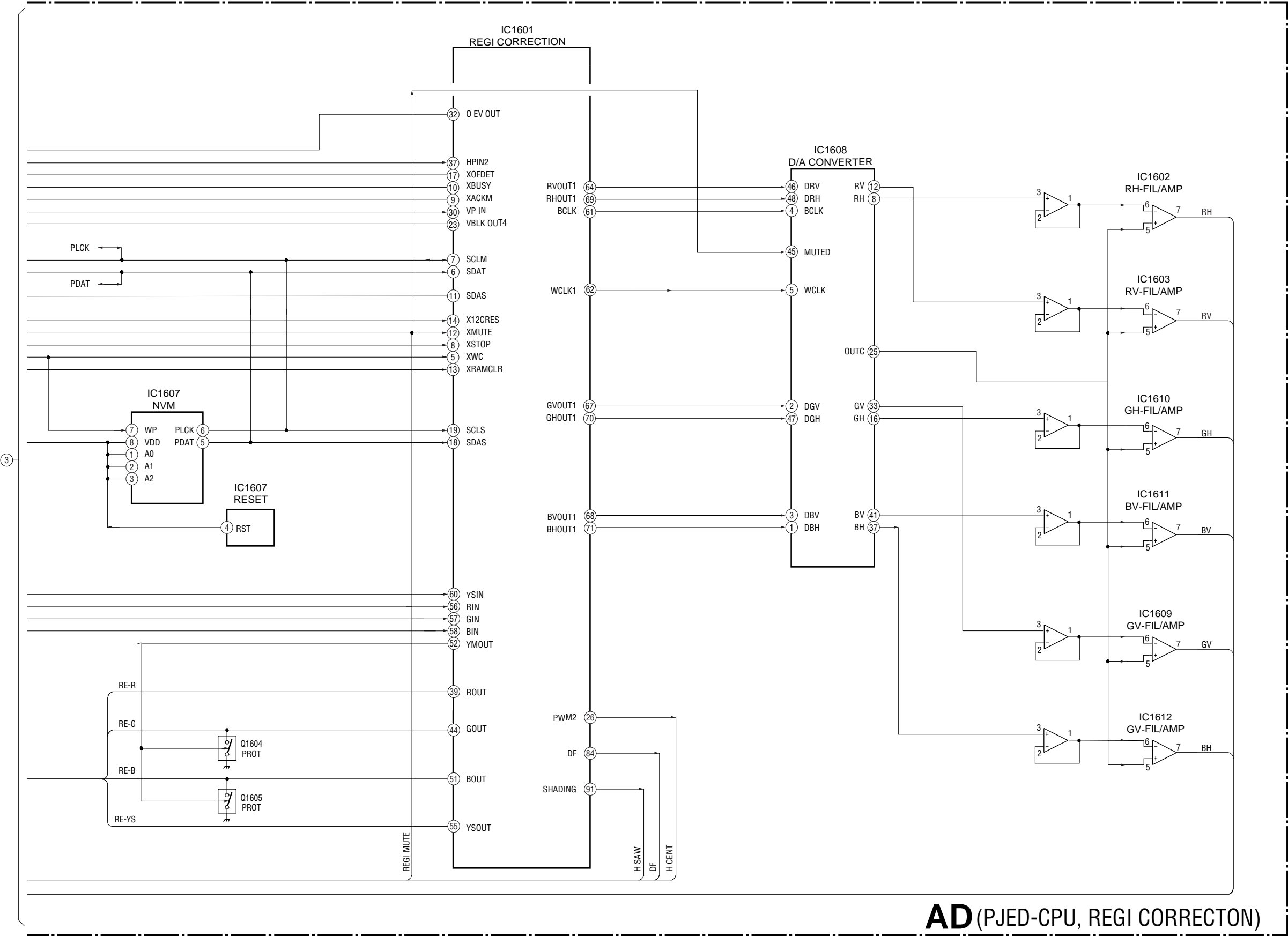




BLOCK DIAGRAM (6)

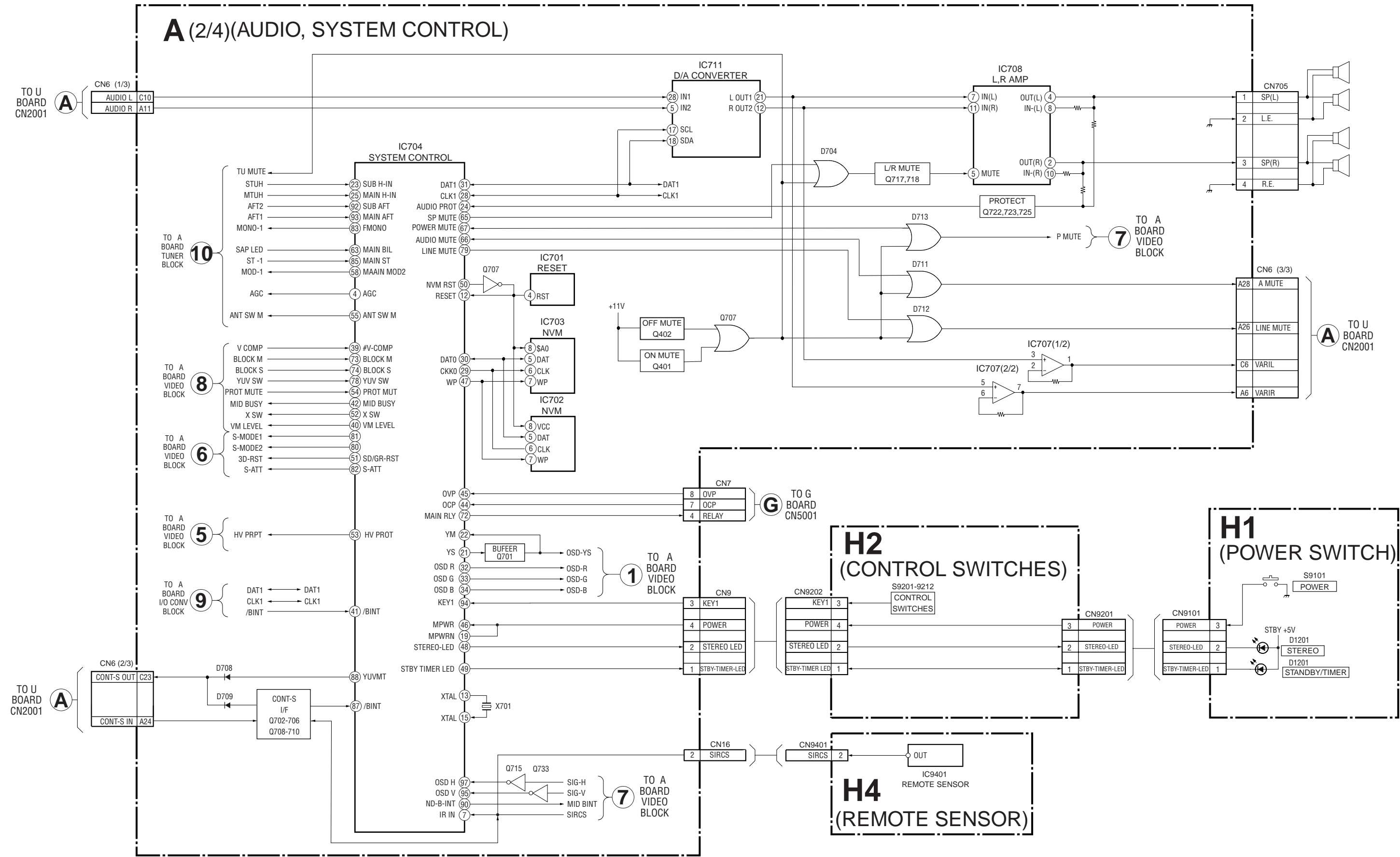


BLOCK DIAGRAM (7)



AD(PJED-CPU, REGI CORRECTON)

BLOCK DIAGRAM (8)



BLOCK DIAGRAM (9)



VM DRIVE

TO A BOARD CN17 (J)

TO A BOARD CN18 (K)

TO A BOARD CN19 (L)

AMP Q9002-9007

VM DRIVE Q9008, 9009

CN9001 VM 6

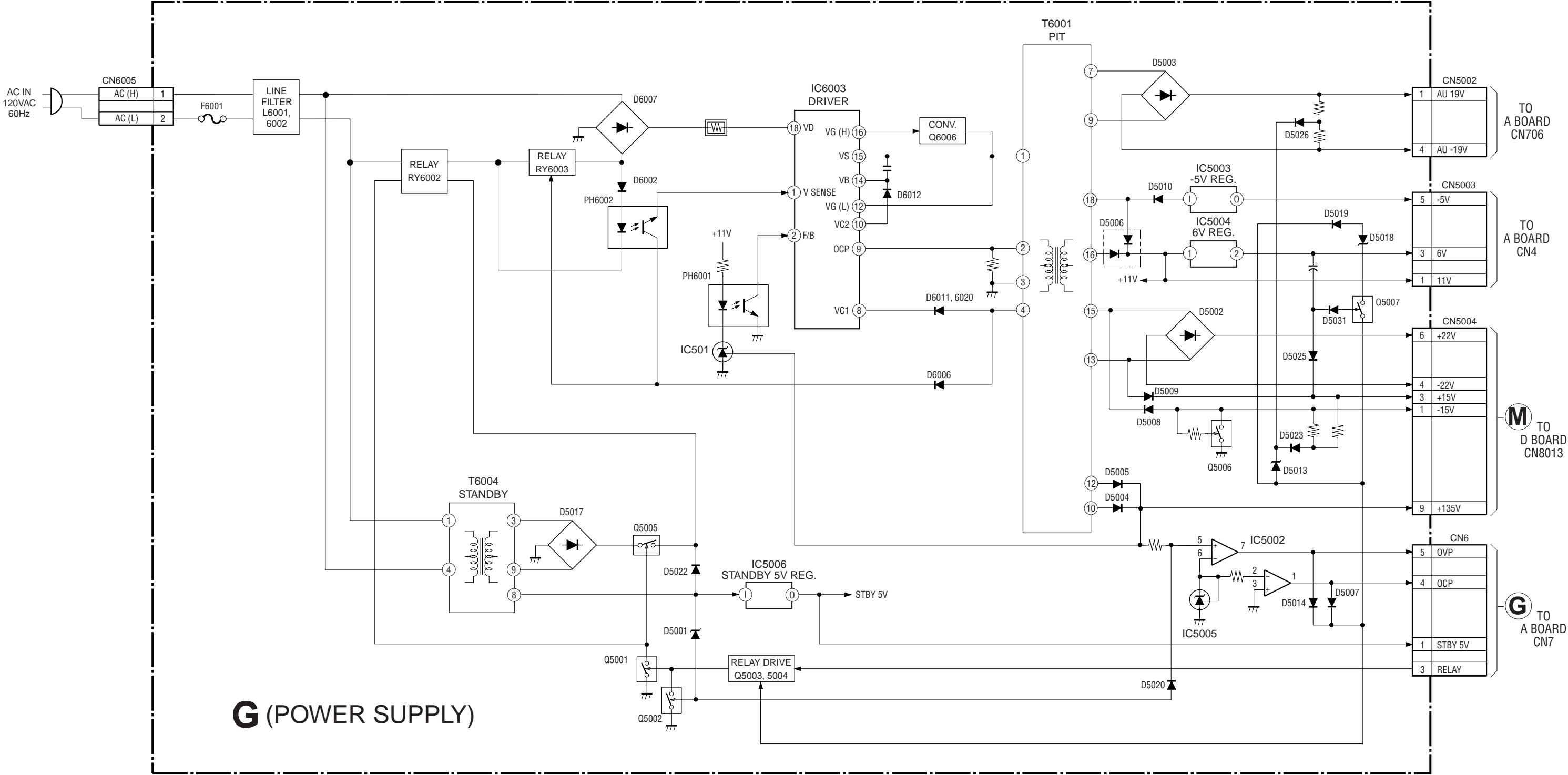
CN9002 VM, OUT VM, RET

VM ASSY VM

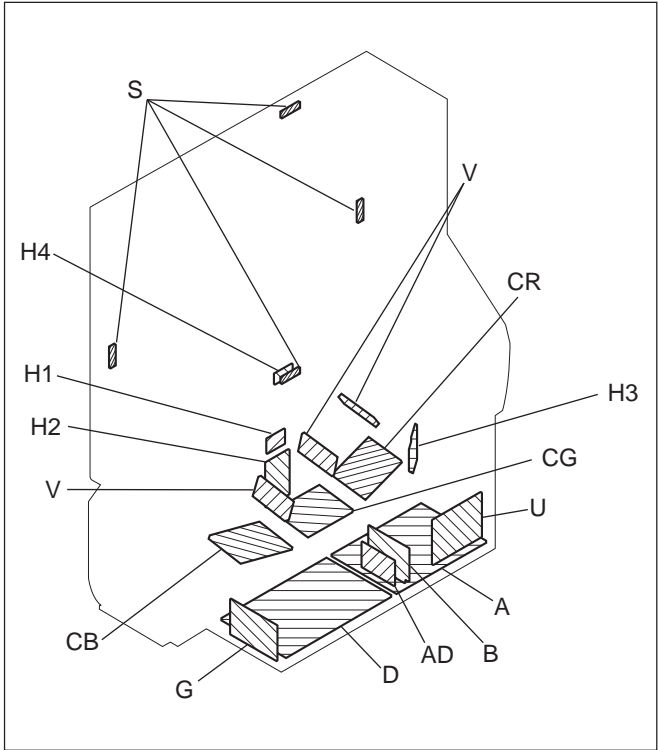
200V



BLOCK DIAGRAM (11)



6-2. CIRCUIT BOARDS LOCATION



Note: The symbol display is on the component side.

The components identified by shading and mark are critical for safety. Replace only with part number specified.

The symbol indicate fast operating fuse. Replace only with fuse of same rating as maked.

Note: Les composants identifiés per un tramé et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Le symbole indique une fusible a action rapide. Doit etre remplacee par une fusible de meme yaleur, comme maque.

6-3. SCHEMATIC DIAGRAMS

- Note:
- Capacitors without voltage indication are all 50V.
 - All resistors are in ohms.
kΩ=1000Ω, MΩ=1000kΩ
 - Indication of resistance, which dose not have one for rating electrical power, is as follows.
Pitch : 5mm
Rating electrical power : 1/4 W
 - : nonflammable resistor.
 - : fusible resistor.
 - : internal component.
 - : panel designation and adjustment for repair.
 - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 - : earth-chassis.
 - The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
 - Should replacement be required, replace only with the value originally used.
 - When replacing components identified by , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved. (Refer to VR8001 and VR8002 adjustment on Page 30.)
 - Readings are taken with a NTSC color-bar signal input.
 - Readings are taken with a 10MΩ digital multimeter.
 - Voltages are dc with respect to ground unless otherwise noted.
 - Voltage variations may be noted due to normal production tolerances.
 - All voltages are in V.
 - * : Measurement impossibility.

• Circled numbers are waveform references.

• : B+ bus.

• : B- bus.

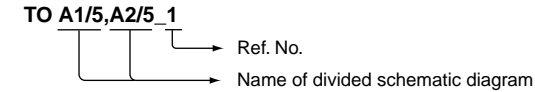
• : signal path.(RF)

- Reference information
- RESISTOR : RN METAL FILM
: RC SOLID
: FPRD NONFLAMMABLE CARBON
: FUSE NONFLAMMABLE FUSIBLE
: RW NONFLAMMABLE WIREWOUND
: RS NONFLAMMABLE METAL OXIDE
: RB NONFLAMMABLE CEMENT
: ※ ADJUSTMENT RESISTOR
COIL : LF-8L MICRO INDUCTOR
CAPACITOR : TA TANTALUM
: PS STYROL
: PP POLYPROPYLENE
: PT MYLAR
: MPS METALIZED POLYESTER
: MPP METALIZED POLYPROPYLENE
: ALB BIPOLAR
: ALT HIGH TEMPERATURE
: ALR HIGH RIPPLE

• Divided schematic diagram

Schematic diagrams of A, AD, B, D, G, and U boards are divided into several pieces. Information to where the line is to be connected is printed at the end of each.

For example, [TO A1/5,A2/5_1] means the line is connected to Ref. No. 1 of A(1/5) and A(2/5) schematic diagrams.

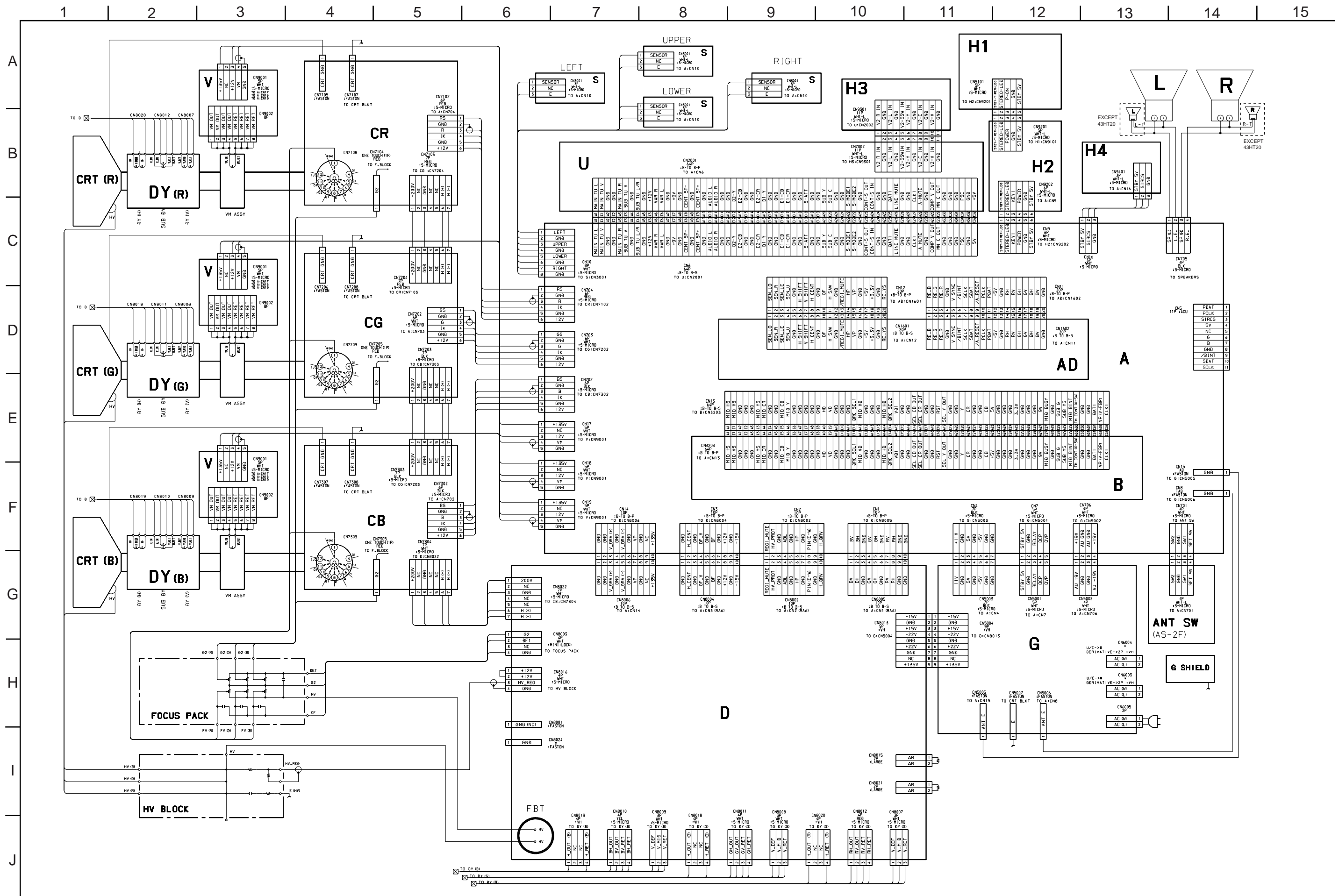


Terminal name of semiconductors in silk screen printed circuit (*)

| | Device | Printed symbol | Terminal name | Circuit |
|---|------------------------|----------------|--------------------------------------|---------|
| ① | Transistor | | Collector Base Emitter | |
| ② | Transistor | | Collector Base Emitter | |
| ③ | Diode | | Cathode Anode | |
| ④ | Diode | | Cathode Anode (NC) | |
| ⑤ | Diode | | Cathode Anode (NC) | |
| ⑥ | Diode | | Common Anode Cathode | |
| ⑦ | Diode | | Common Anode Cathode | |
| ⑧ | Diode | | Common Anode Anode | |
| ⑨ | Diode | | Common Anode Anode | |
| ⑩ | Diode | | Common Cathode Cathode | |
| ⑪ | Diode | | Common Cathode Cathode | |
| ⑫ | Diode | | Anode Anode Cathode Cathode | |
| ⑬ | Transistor (FET) | | Drain Source Gate | |
| ⑭ | Transistor (FET) | | Drain Source Gate | |
| ⑮ | Transistor (FET) | | Source Drain Gate | |
| ⑯ | Transistor | | Emitter Collector Base | |
| ⑰ | Transistor | | C2(B1)E1 E2(B2)C1 | |
| ⑱ | Transistor | | C1(B2)E2 E1(B1)C2 | |
| ⑲ | Transistor | | C1 B2 E2 E1 B1 C2 | |
| ⑳ | Transistor | | C1 B2 E2 E1 B1 C2 | |
| ㉑ | Transistor | | E2 B1 E1 C2 C1(B2) | |
| ㉒ | Transistor | | (B2) B1 E1 E2 C1 C2 | |
| ㉓ | Transistor | | (B2) E2 E1 B1 C2 C1 | |
| — | Discrete semiconductot | | | |

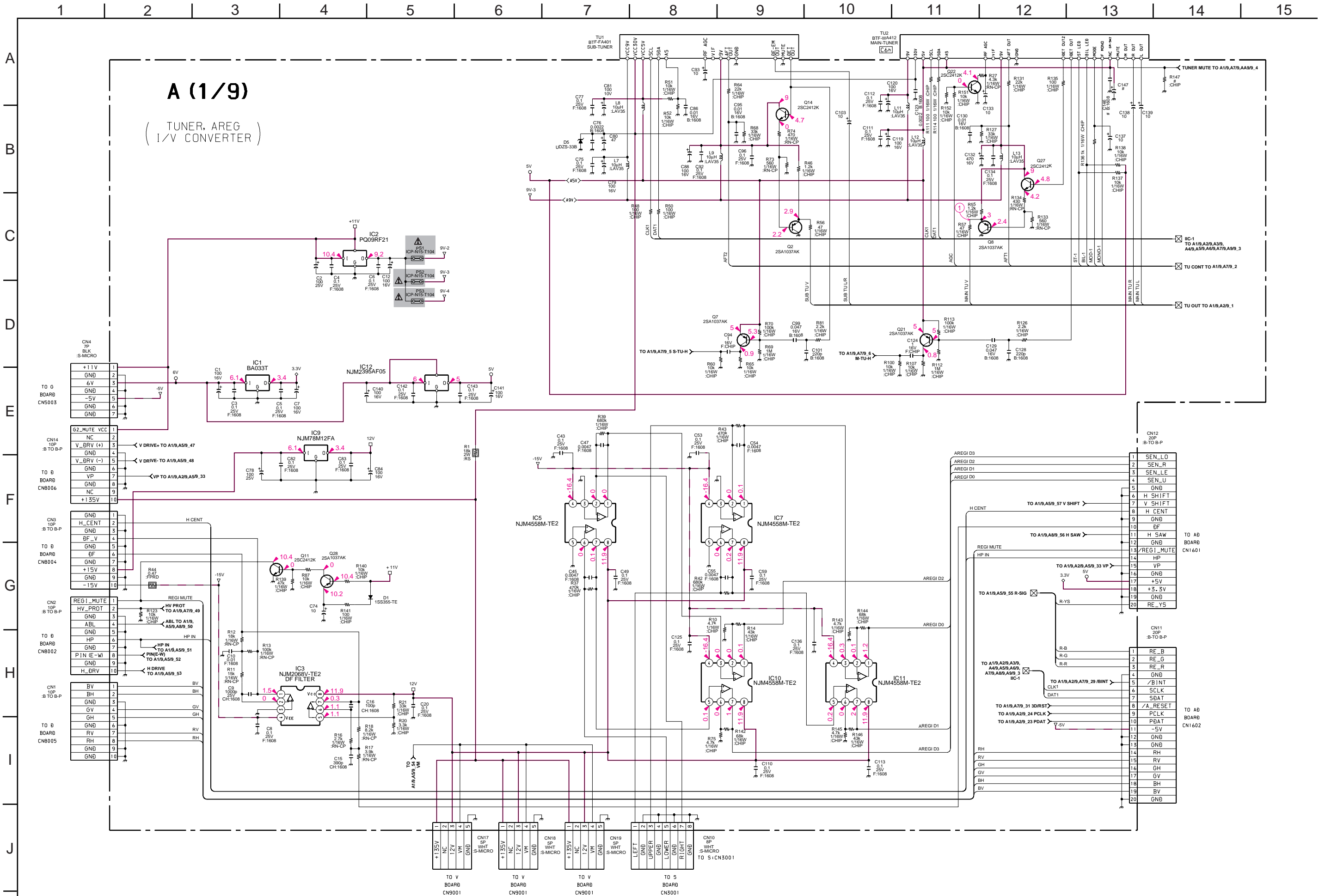
(Chip semiconductors that are not actually used are included.)

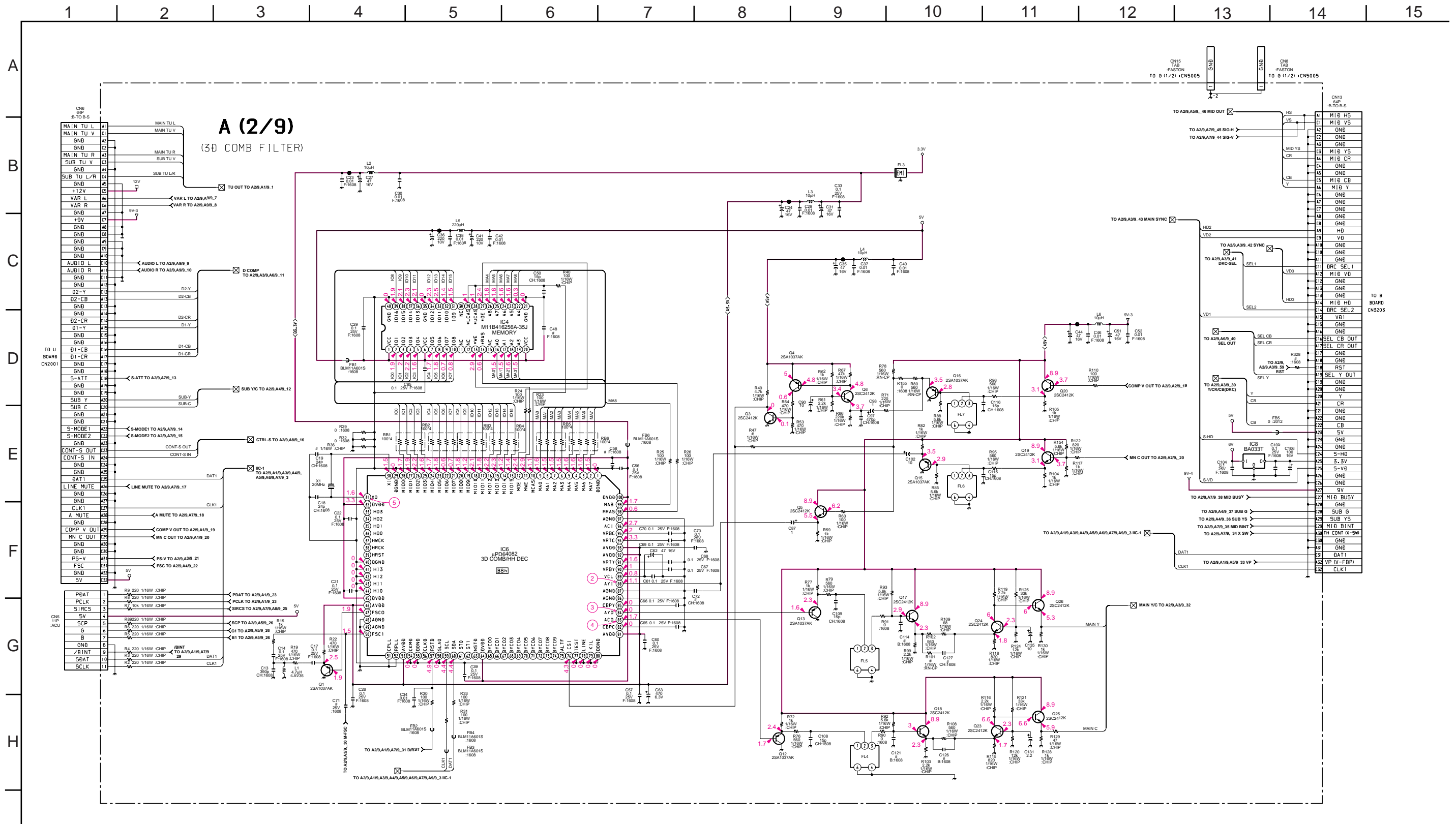
Ver.1.5

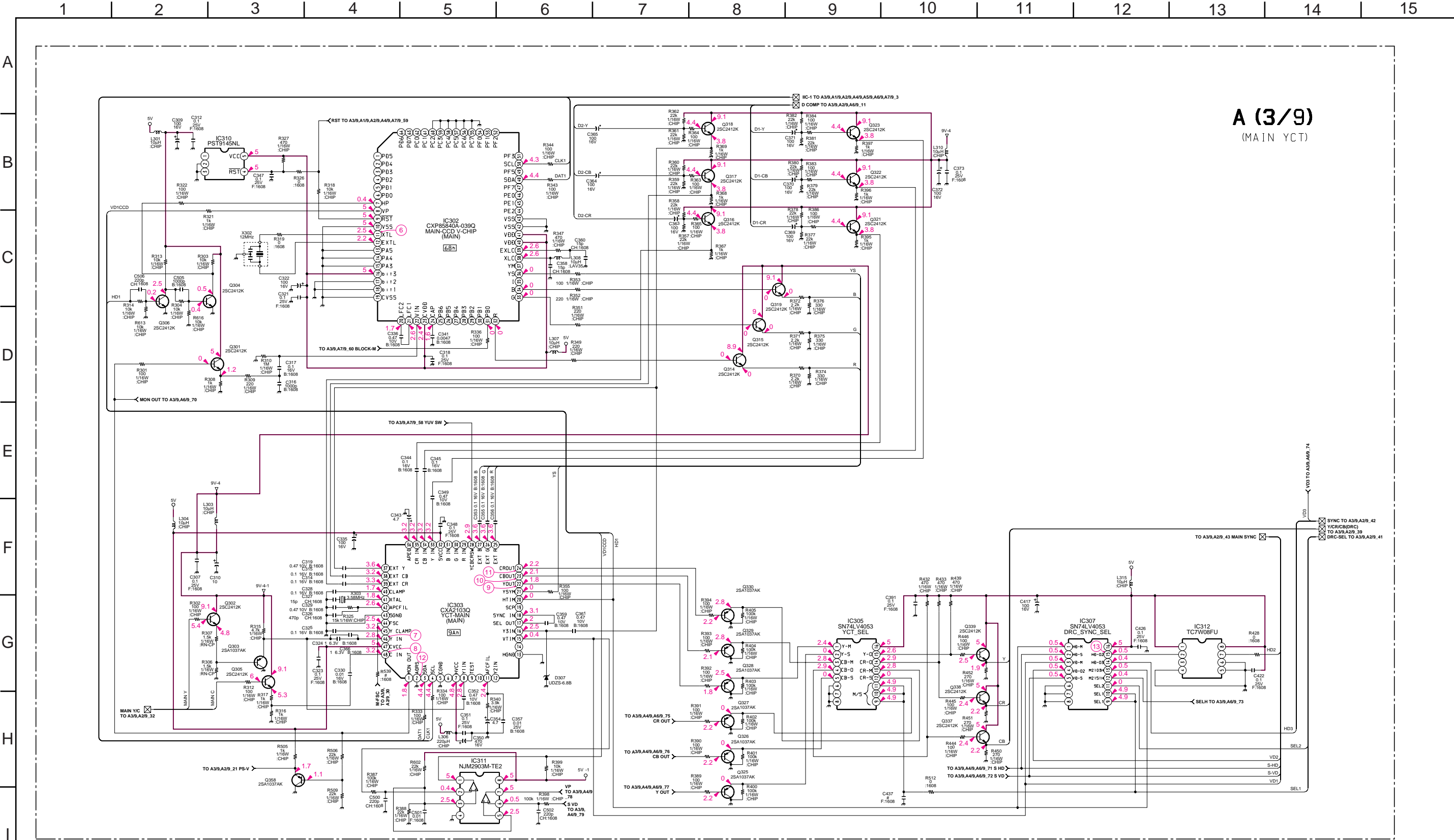


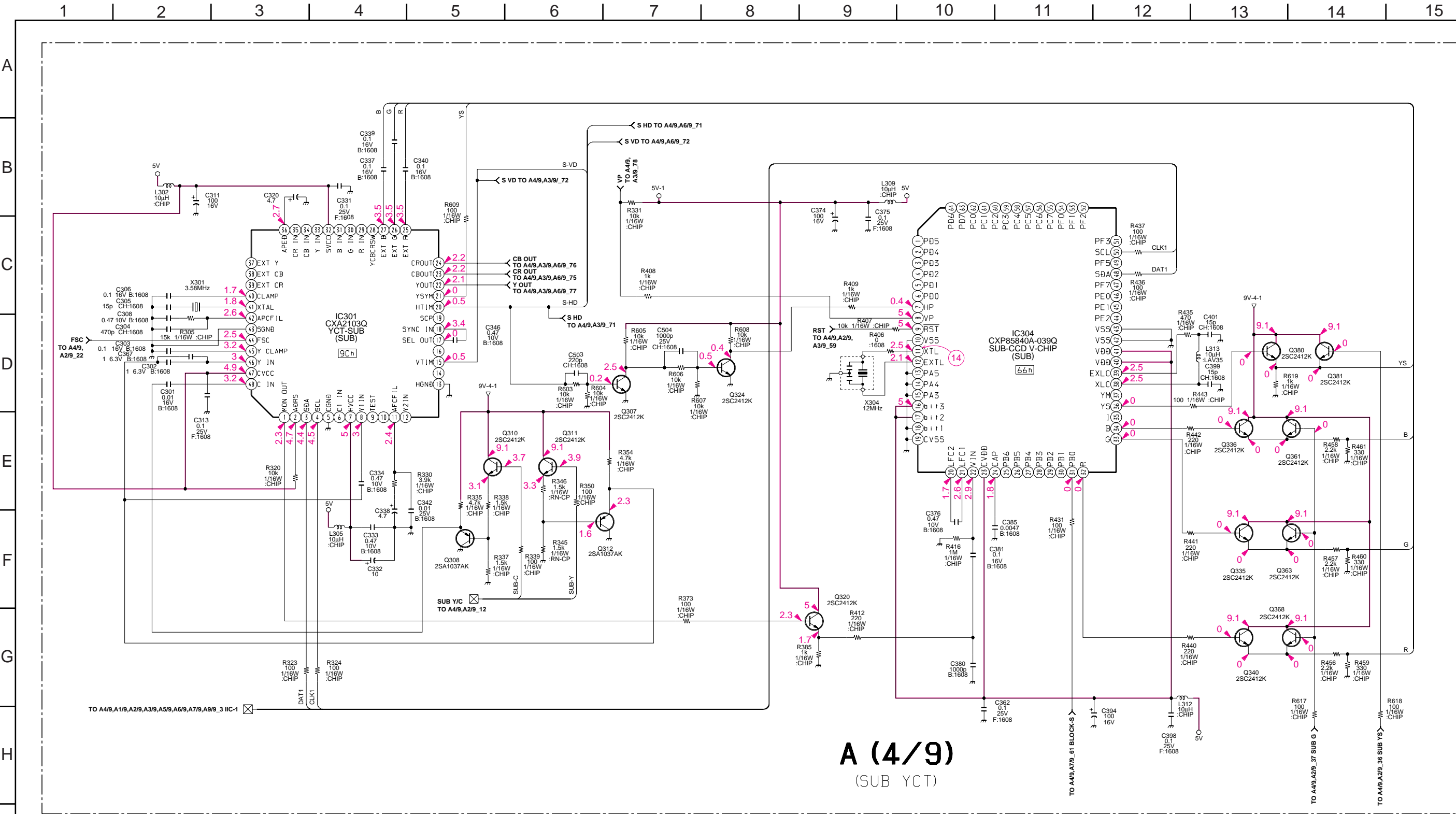
A (1/9)

(TUNER, AREG
I/V CONVERTER)



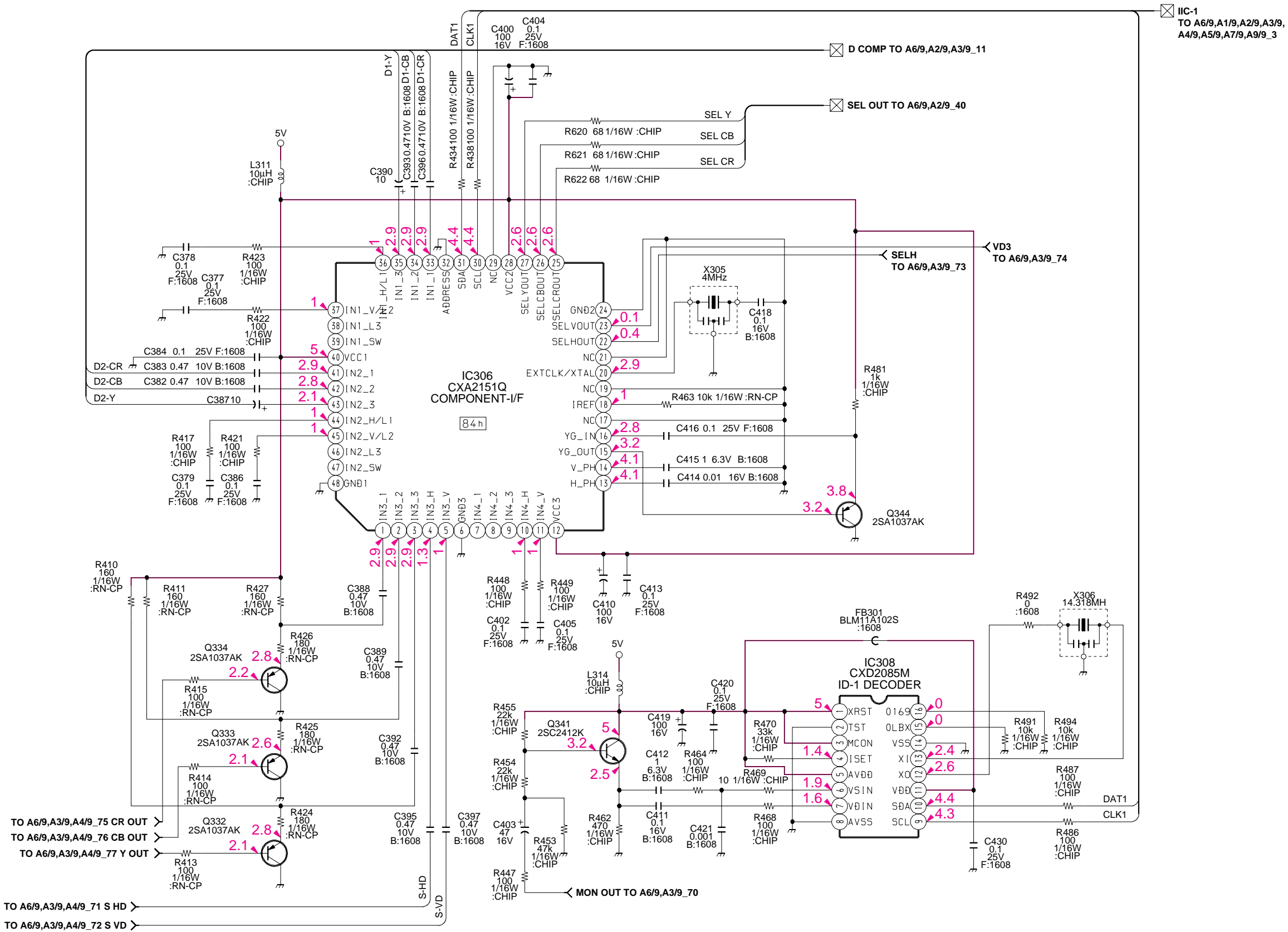


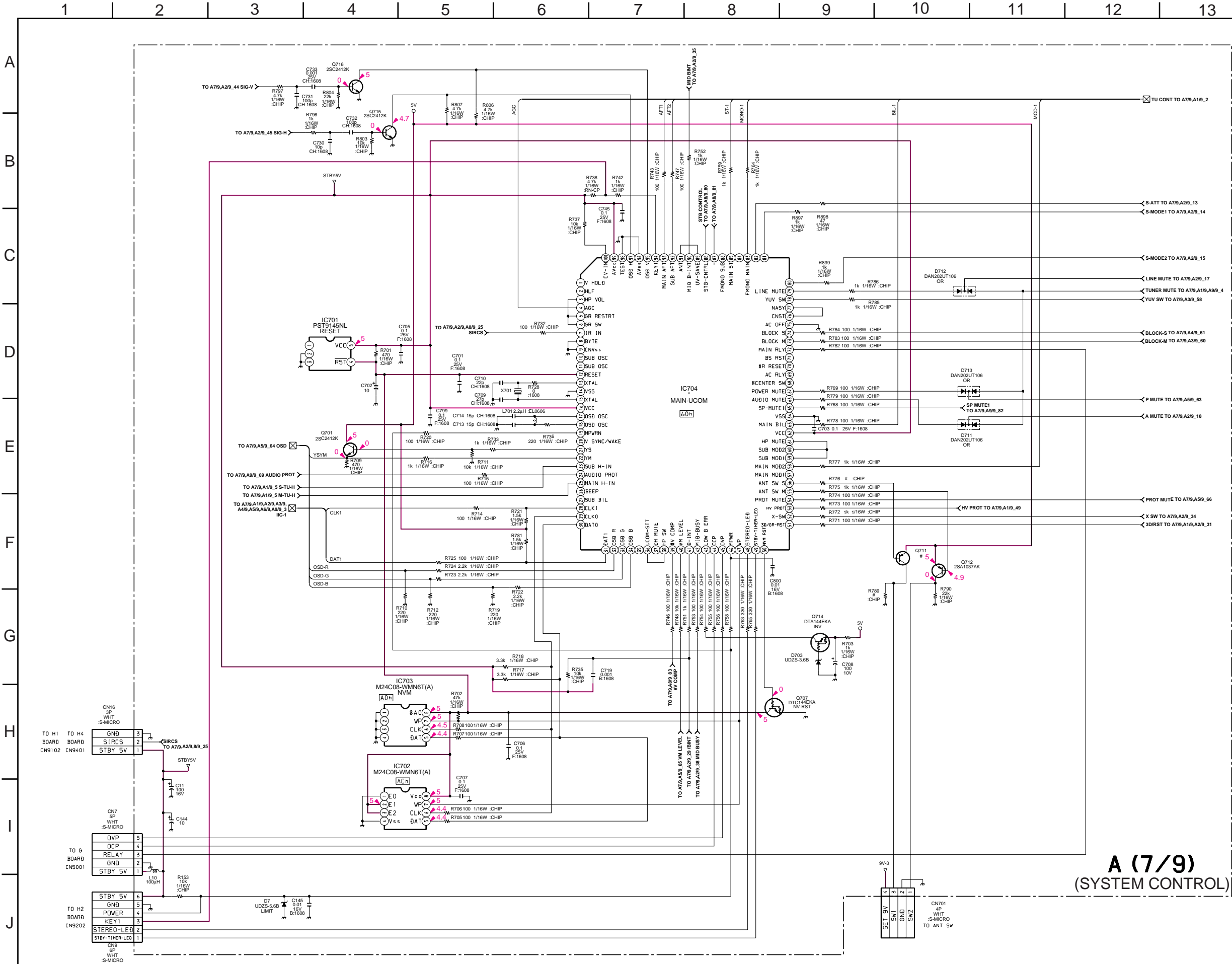




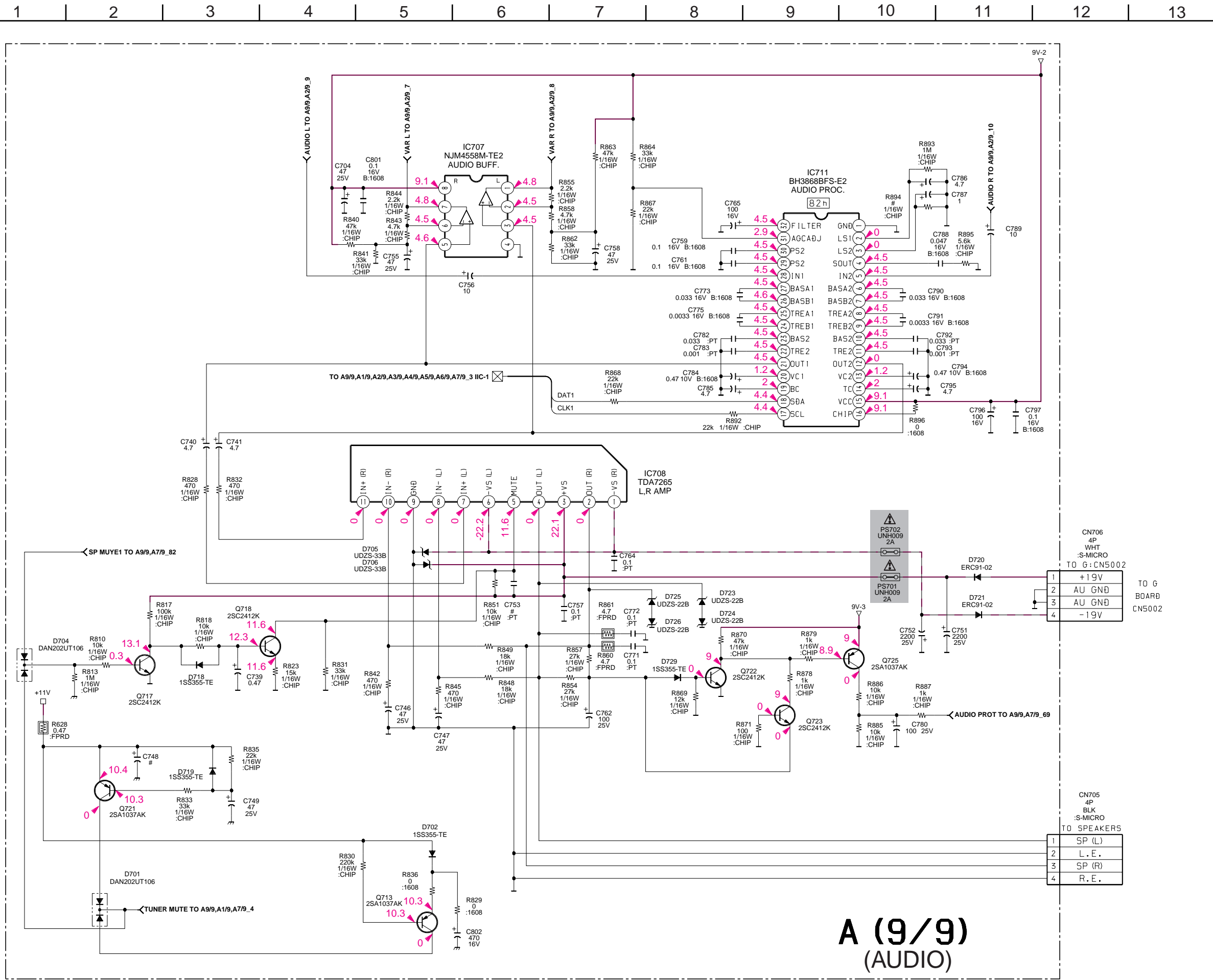


A (6/9) (COMPONENT I/F, ID-1 DECODER)

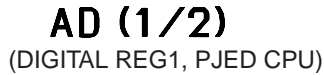




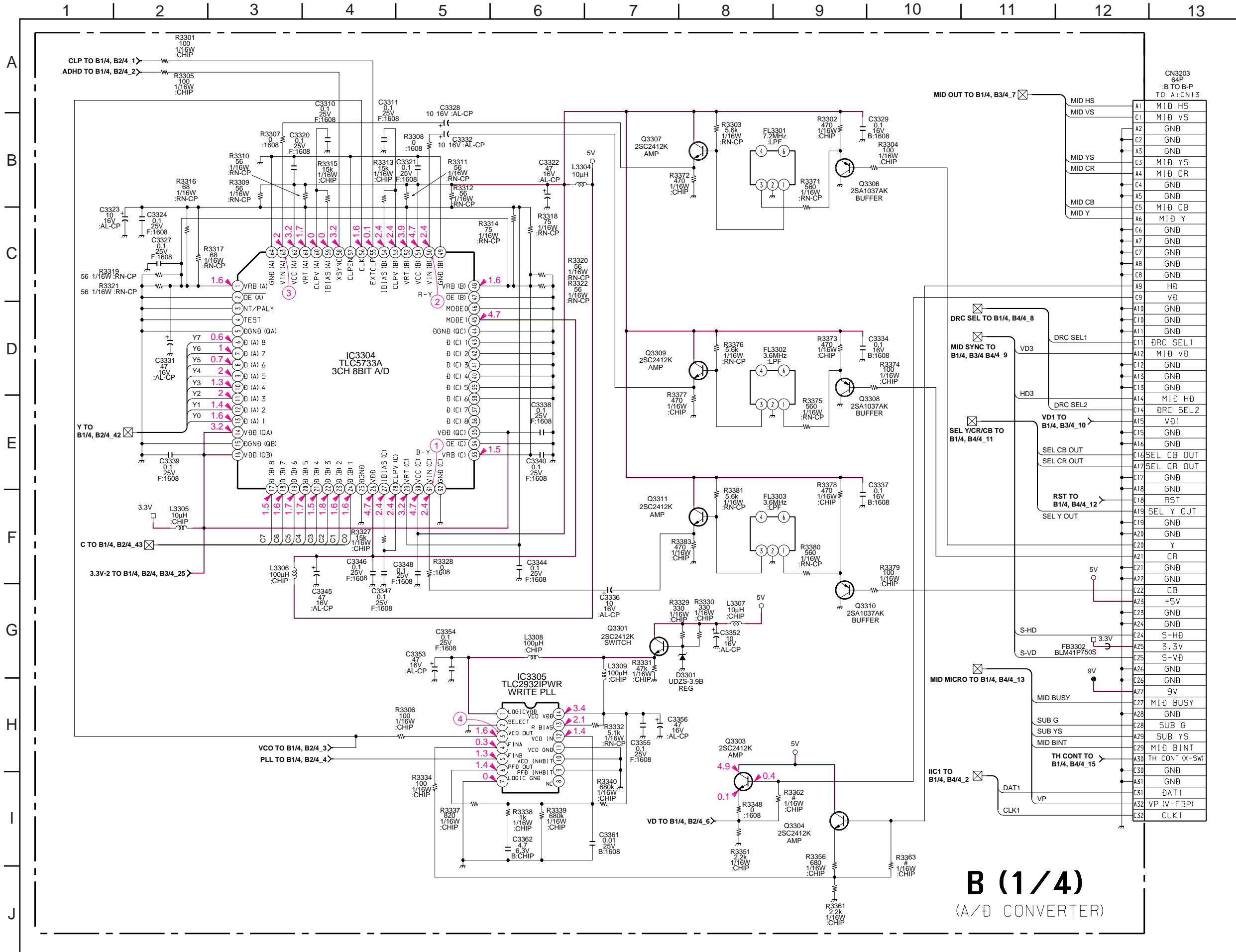


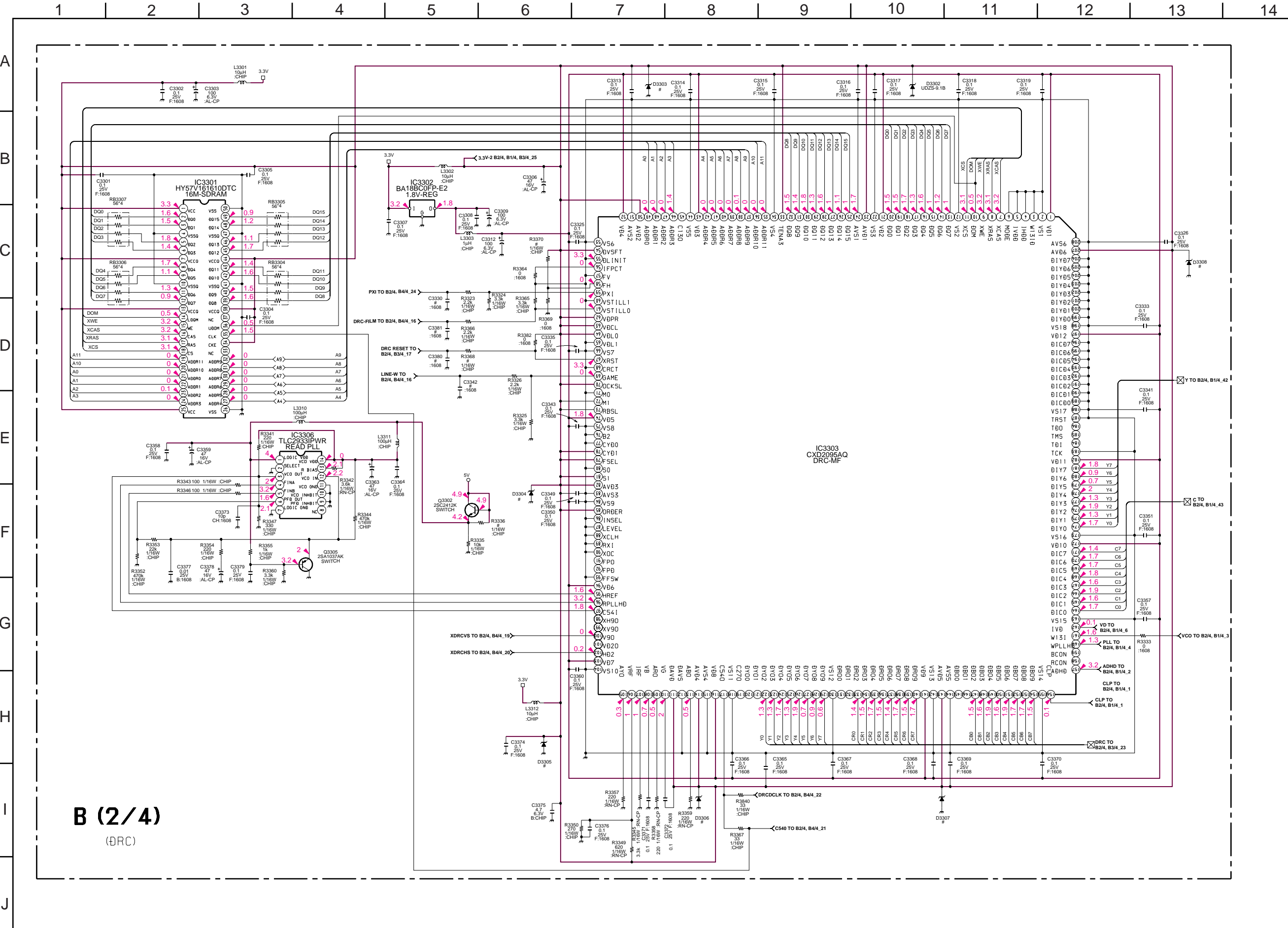


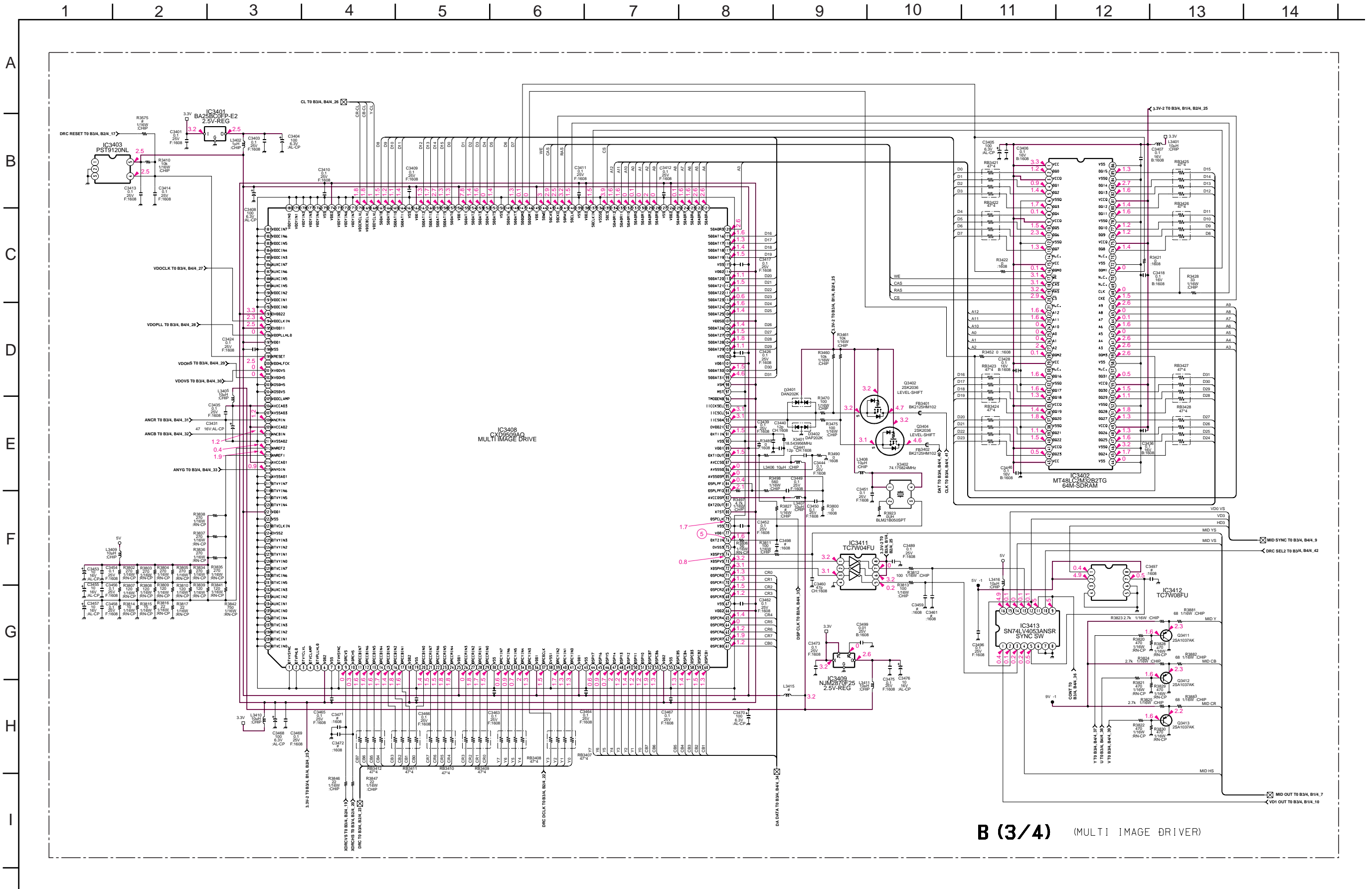
A (9/9)
(AUDIO)

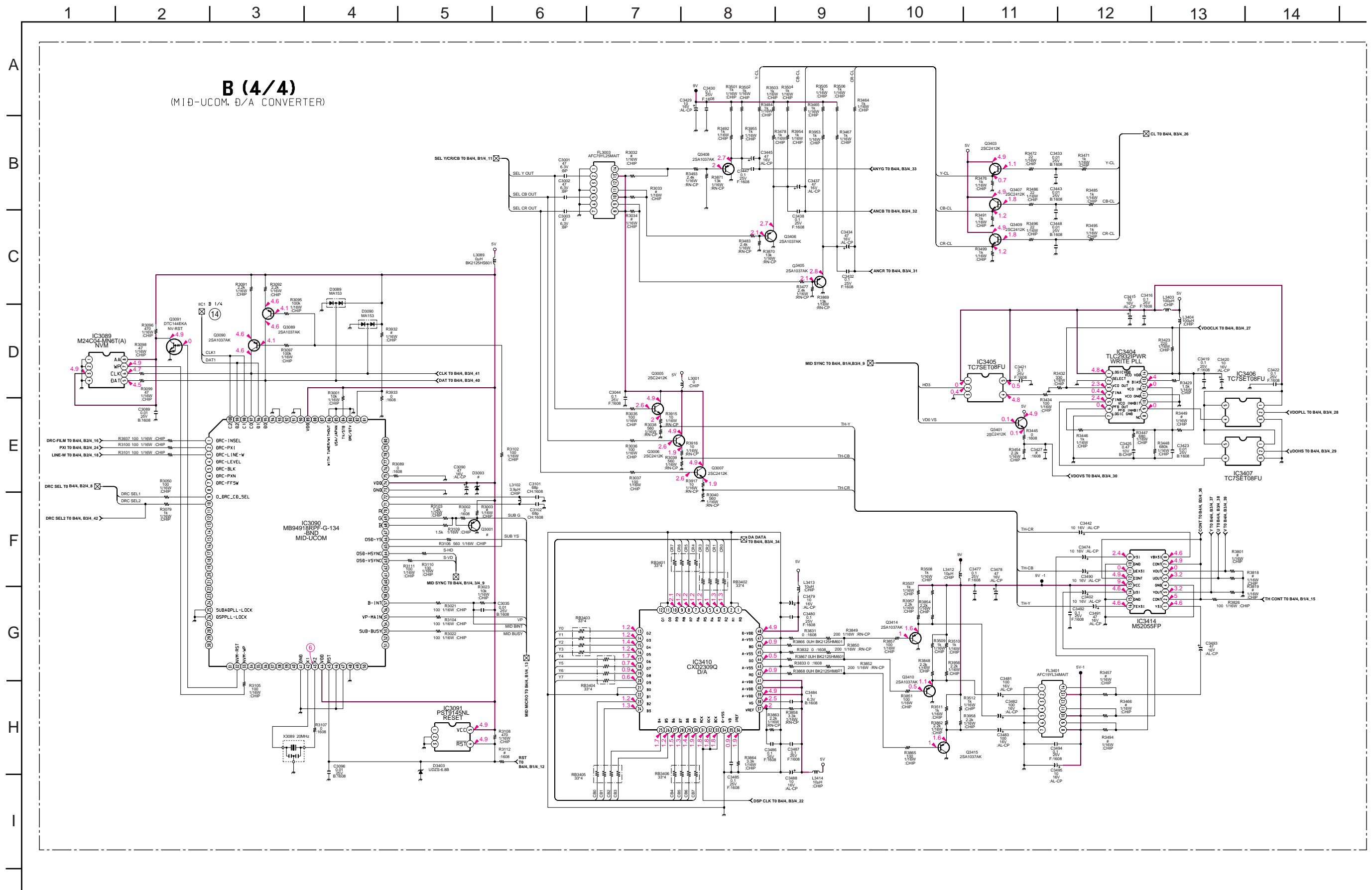


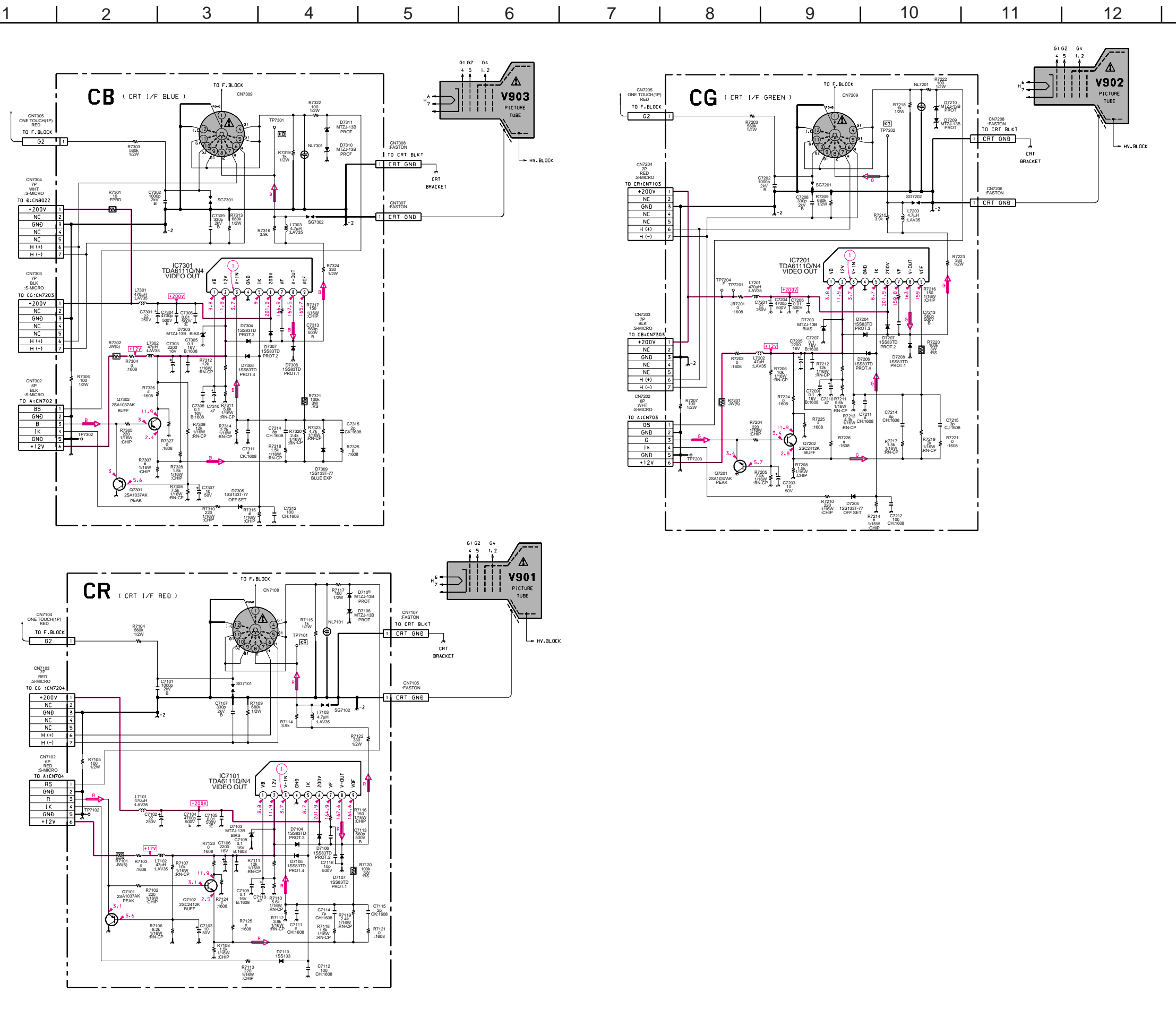


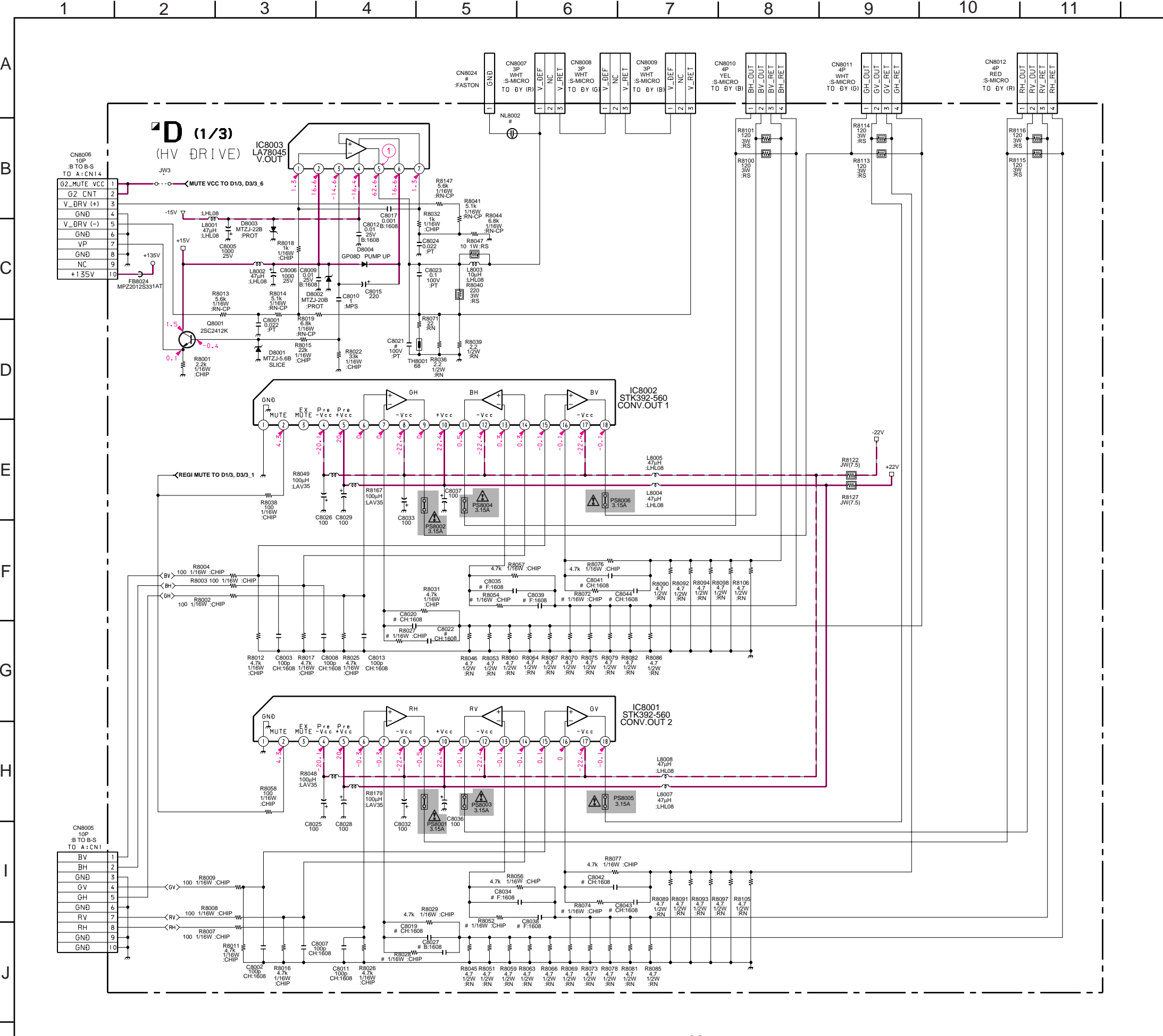


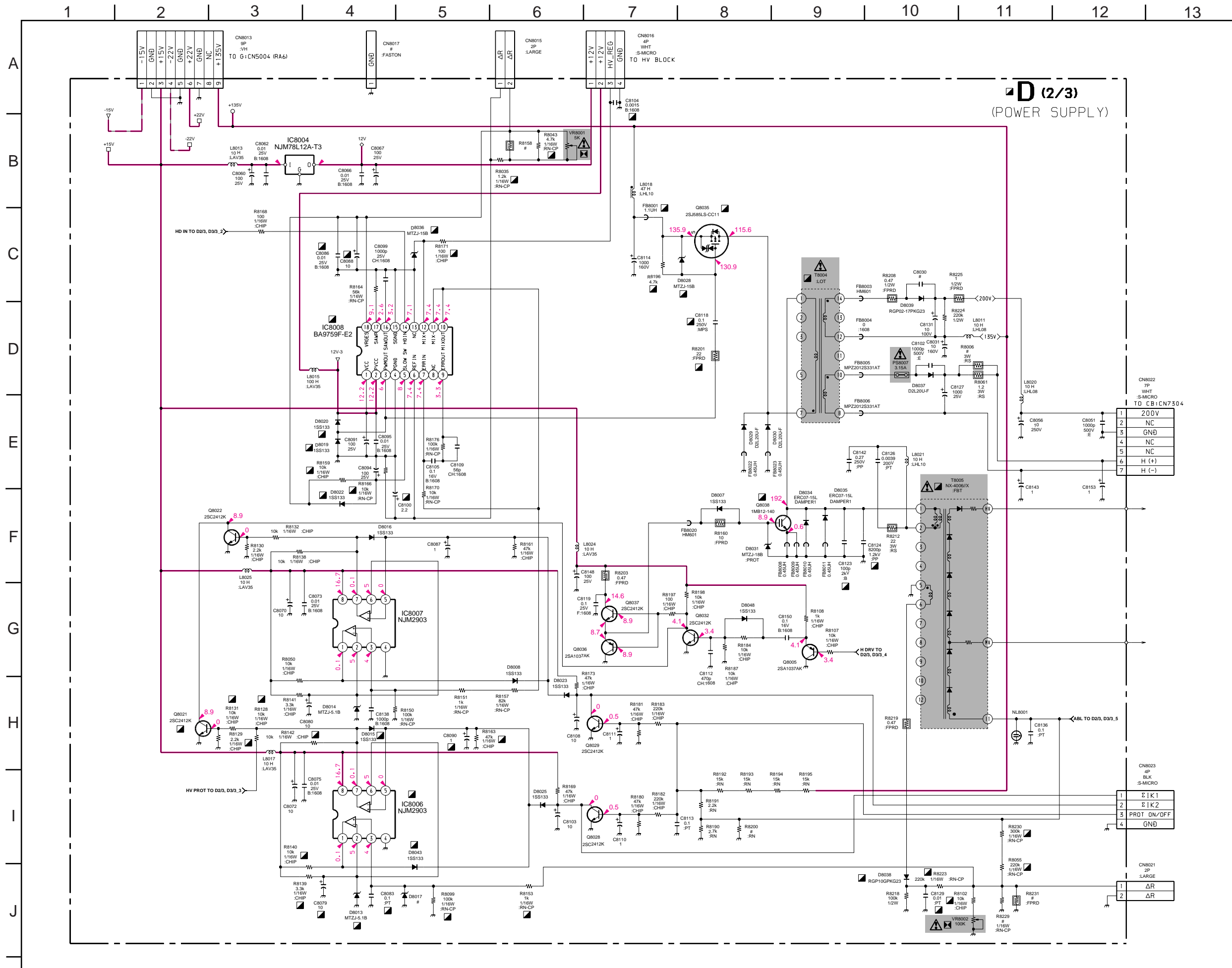








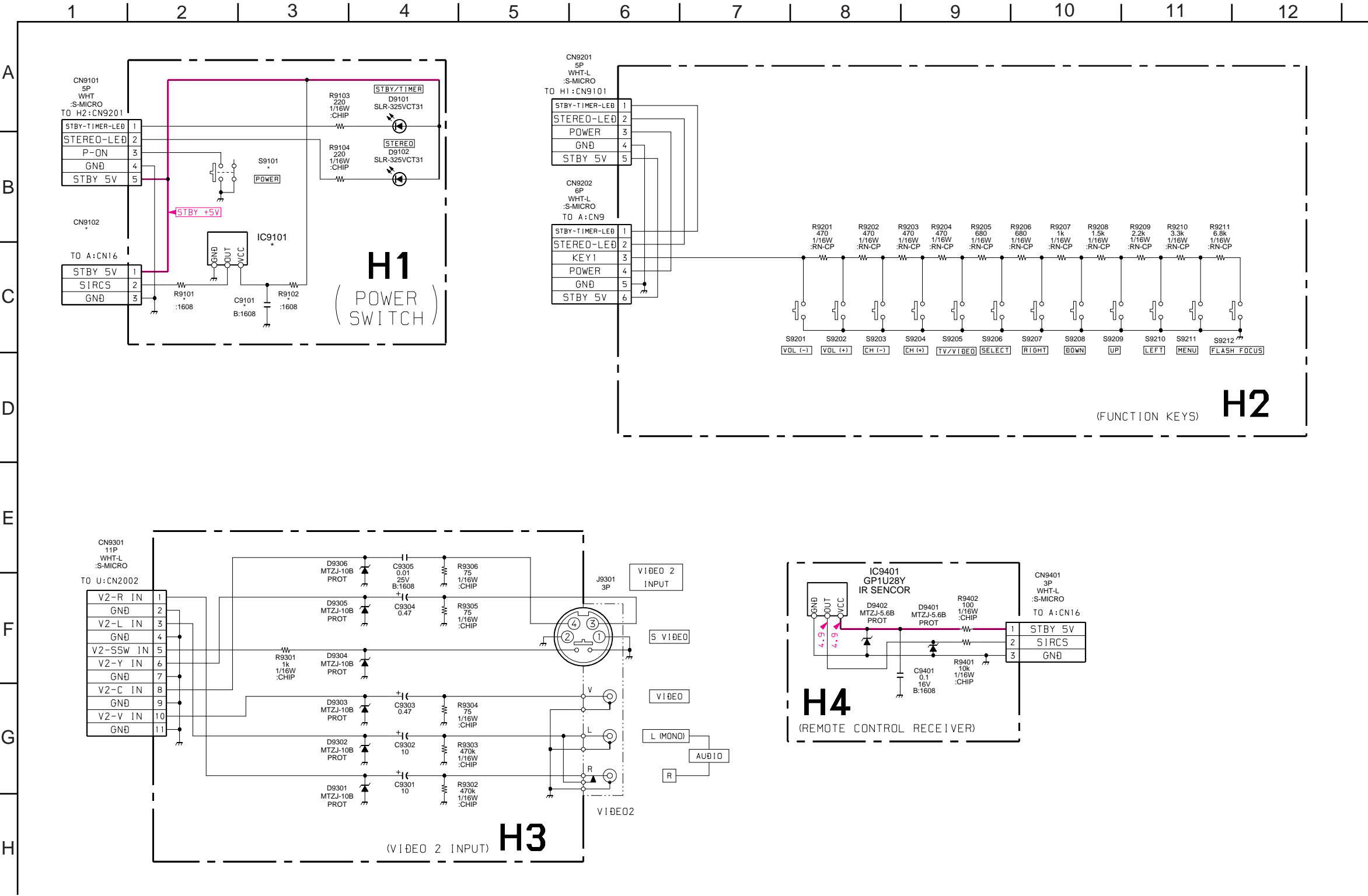


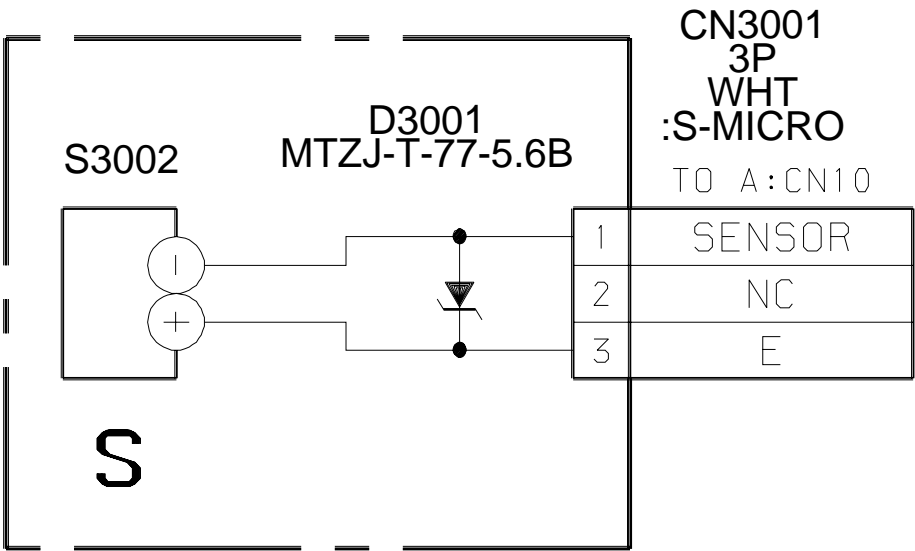


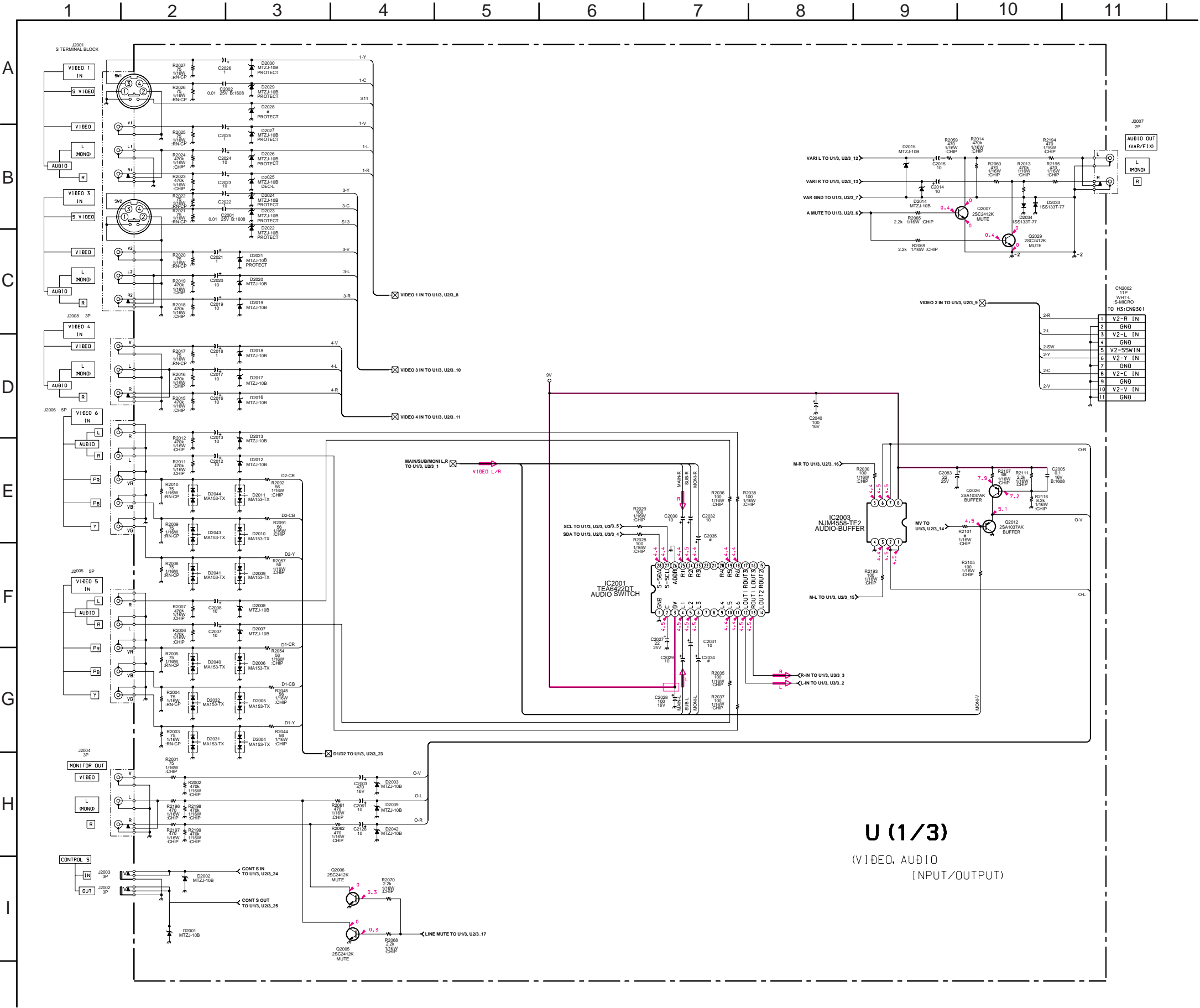






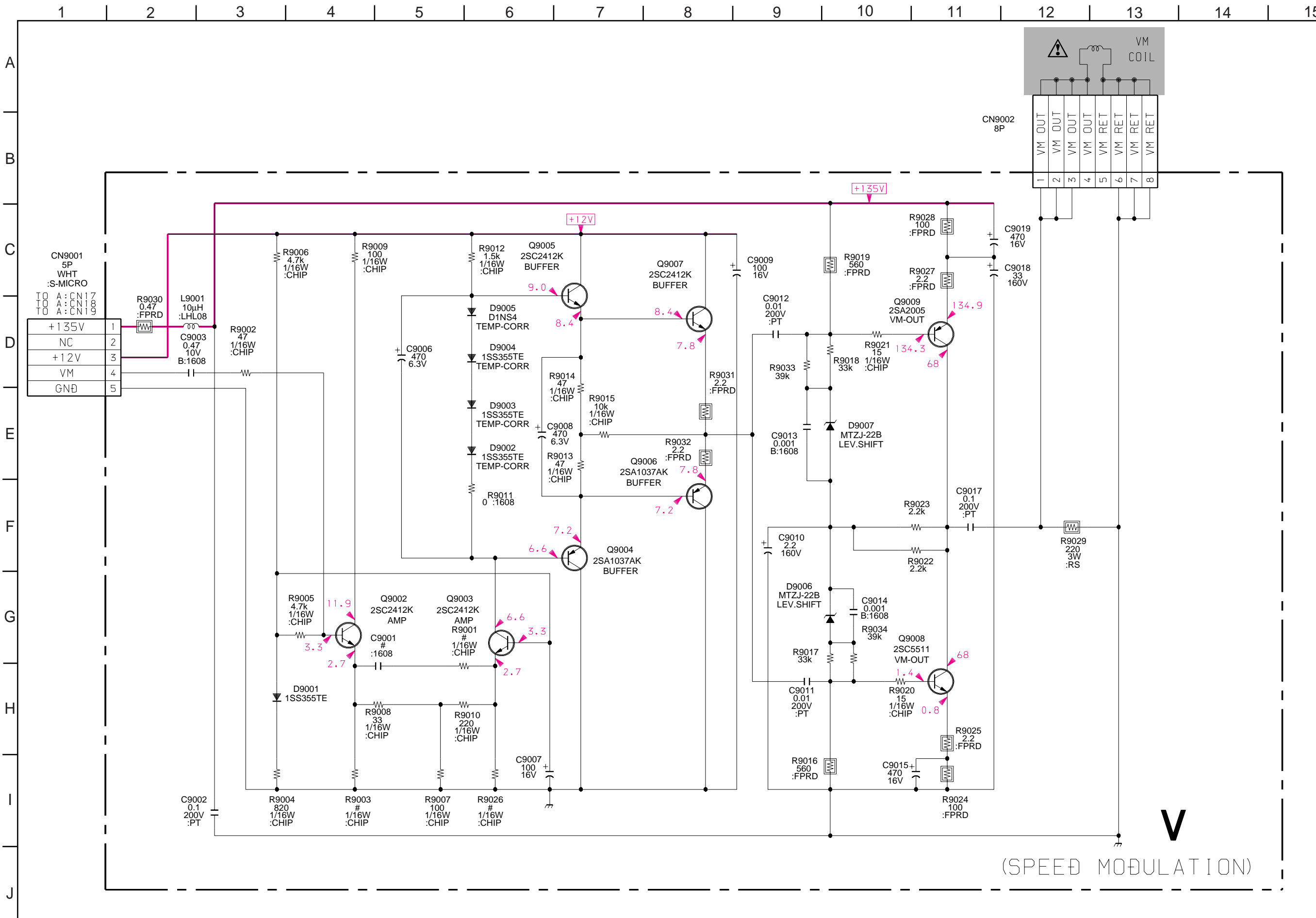








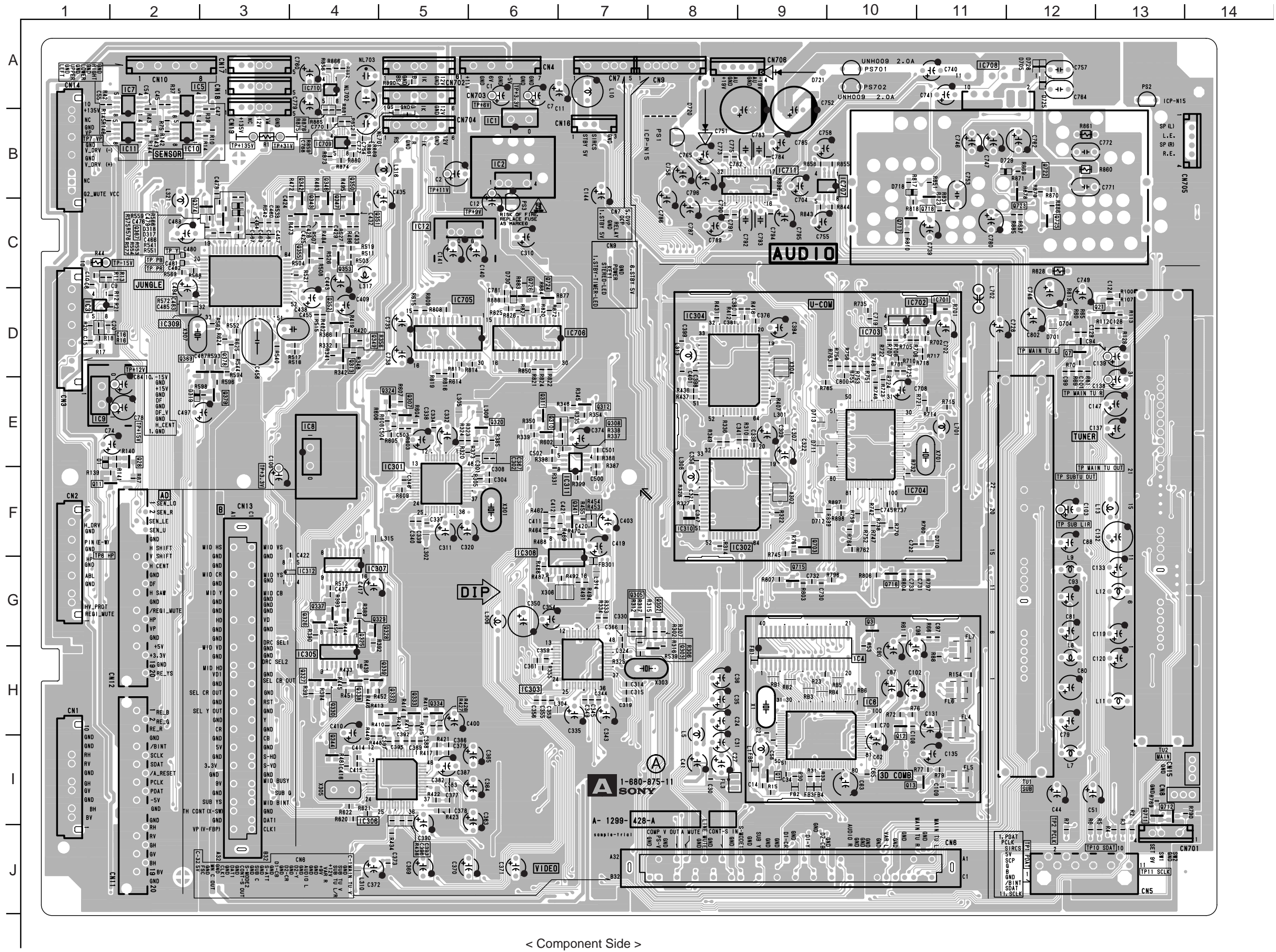




A [TUNER, VIDEO, AUDIO, SYSTEM CONTROL]

- A Board -

| DIODE | | * | TRANSISTOR * | |
|-------|------|---|--------------|--------|
| D1 | E-2 | ③ | Q1 | I-9 ② |
| D317 | C-3 | ③ | Q3 | G-10 ② |
| D318 | C-3 | ③ | Q7 | D-12 ② |
| D319 | E-2 | ③ | Q11 | F-1 ② |
| D701 | D-12 | ⑨ | Q12 | H-10 ② |
| D704 | D-12 | ⑨ | Q13 | I-11 ② |
| D705 | A-12 | ③ | Q21 | D-13 ② |
| D710 | F-11 | ⑨ | Q302 | G-8 ② |
| D711 | E-9 | ⑨ | Q303 | H-8 ② |
| D712 | F-9 | ⑨ | Q305 | G-7 ② |
| D713 | E-9 | ⑨ | Q307 | E-5 ② |
| D718 | B-10 | ③ | Q308 | E-7 ② |
| D720 | B-8 | ② | Q310 | E-6 ② |
| D721 | A-9 | ② | Q311 | E-6 ② |
| D725 | A-12 | ③ | Q312 | E-7 ② |
| D726 | A-12 | ③ | Q313 | D-4 ② |
| D729 | B-11 | ③ | Q320 | E-6 ② |
| D730 | D-6 | ③ | Q324 | E-5 ② |
| IC | | | Q325 | G-4 ② |
| IC1 | B-6 | | Q326 | G-4 ② |
| IC2 | B-6 | | Q327 | H-4 ② |
| IC3 | D-1 | | Q328 | G-4 ② |
| IC4 | H-9 | | Q329 | G-4 ② |
| IC5 | A-2 | | Q330 | H-4 ② |
| IC6 | H-9 | | Q332 | H-5 ② |
| IC7 | A-2 | | Q333 | H-5 ② |
| IC8 | E-4 | | Q334 | H-5 ② |
| IC9 | E-1 | | Q337 | G-4 ② |
| IC10 | B-2 | | Q338 | H-4 ② |
| IC11 | B-2 | | Q339 | H-4 ② |
| IC12 | C-5 | | Q341 | F-7 ② |
| IC301 | F-5 | | Q342 | B-4 ② |
| IC302 | F-8 | | Q343 | C-4 ② |
| IC303 | H-7 | | Q344 | I-4 ② |
| IC304 | D-8 | | Q346 | B-4 ② |
| IC305 | H-4 | | Q347 | C-4 ② |
| IC306 | I-5 | | Q349 | D-4 ② |
| IC307 | G-4 | | Q350 | B-4 ② |
| IC308 | D-3 | | Q351 | C-4 ② |
| IC309 | C-3 | | Q352 | D-4 ② |
| IC310 | F-8 | | Q353 | C-4 ② |
| IC311 | F-7 | | Q355 | C-4 ② |
| IC312 | G-4 | | Q367 | C-3 ② |
| IC701 | D-11 | | Q369 | D-2 ② |
| IC702 | D-10 | | Q374 | C-3 ② |
| IC703 | D-10 | | Q378 | D-2 ② |
| IC704 | F-10 | | Q379 | E-3 ② |
| IC705 | D-5 | | Q703 | F-9 ② |
| IC706 | D-6 | | Q712 | I-13 ② |
| IC707 | B-10 | | Q713 | I-13 ② |
| IC708 | A-11 | | Q715 | G-9 ② |
| IC709 | B-4 | | Q716 | G-10 ② |
| IC710 | A-4 | | Q717 | C-10 ② |
| IC711 | B-9 | | Q718 | B-11 ② |
| | | | Q722 | B-12 ② |
| | | | Q723 | B-12 ② |
| | | | Q724 | D-6 ② |
| | | | Q725 | C-12 ② |
| | | | Q726 | D-6 ② |

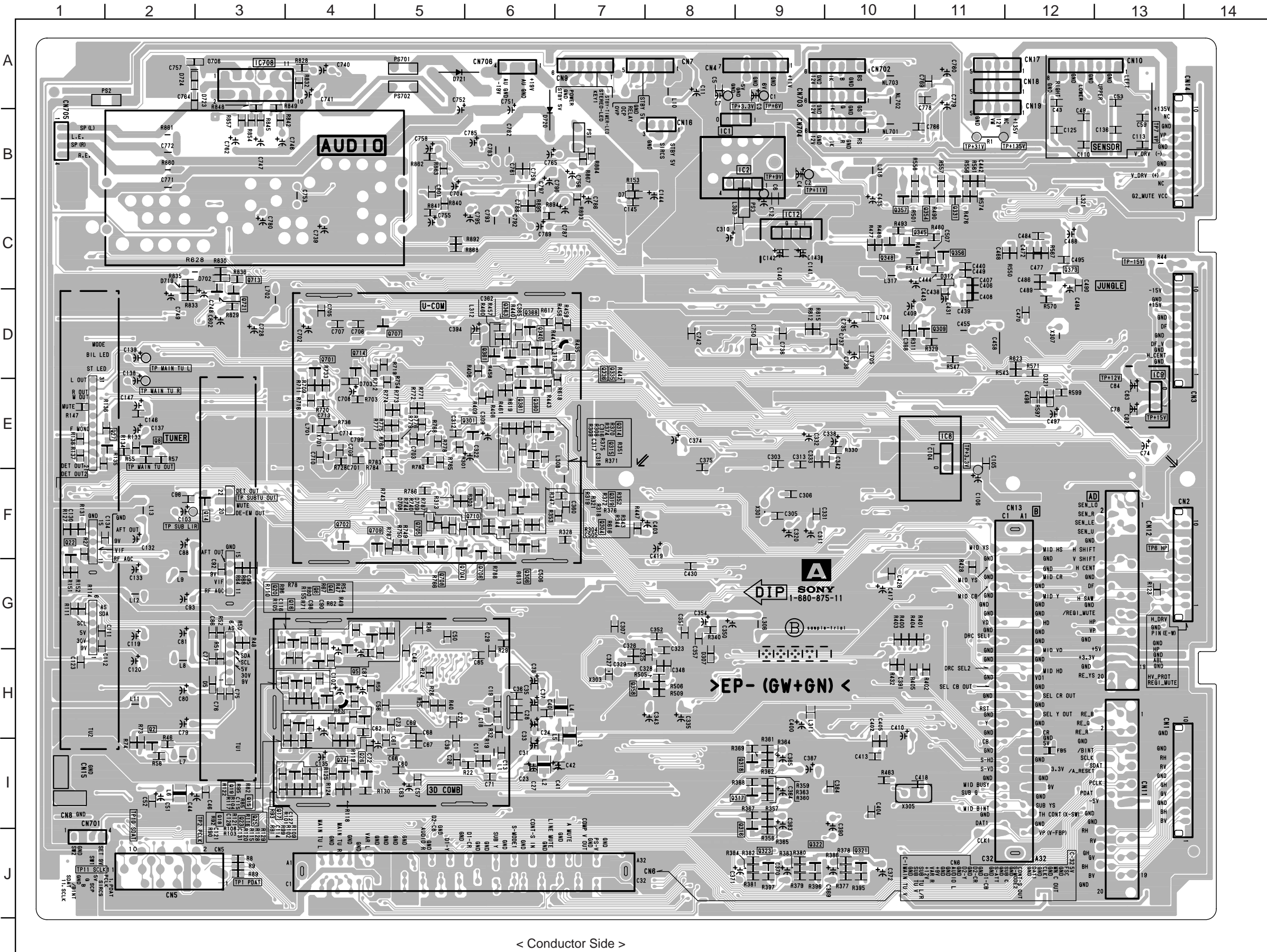


< Component Side >

A [TUNER, VIDEO, AUDIO, SYSTEM CONTROL]

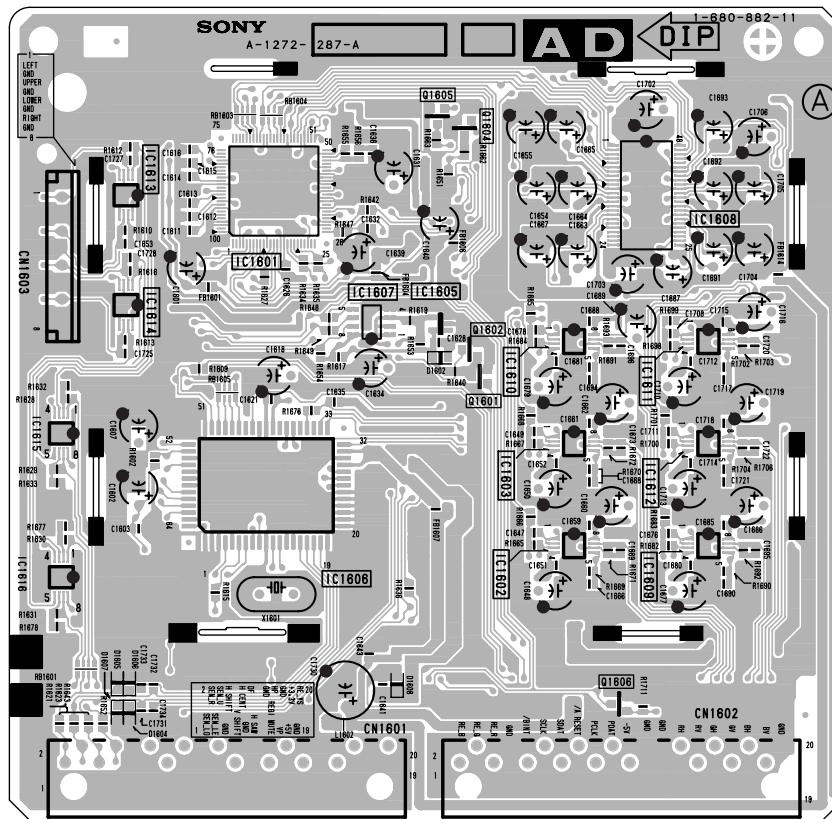
– A Board –

| DIODE | | | Q27 | | | E-1 | | |
|------------|------|---|------|------|---|------|------|---|
| D5 | H-3 | ③ | Q28 | I-4 | ① | Q28 | I-4 | ① |
| D7 | C-7 | ③ | Q301 | E-6 | ① | Q301 | E-6 | ① |
| D307 | H-8 | ③ | Q304 | F-6 | ① | Q304 | F-6 | ① |
| D312 | C-11 | ③ | Q306 | F-6 | ① | Q306 | F-6 | ① |
| D702 | E-12 | ③ | Q309 | D-11 | ① | Q309 | D-11 | ① |
| D703 | E-4 | ③ | Q314 | E-6 | ① | Q314 | E-6 | ① |
| D706 | A-3 | ③ | Q315 | E-6 | ① | Q315 | E-6 | ① |
| D708 | F-5 | ③ | Q316 | J-9 | ① | Q316 | J-9 | ① |
| D709 | F-5 | ③ | Q317 | I-9 | ① | Q317 | I-9 | ① |
| D719 | D-2 | ③ | Q318 | I-9 | ① | Q318 | I-9 | ① |
| D720 | B-6 | ③ | Q319 | F-6 | ① | Q319 | F-6 | ① |
| D721 | A-5 | ③ | Q321 | J-10 | ① | Q321 | J-10 | ① |
| D723 | A-3 | ③ | Q322 | J-10 | ① | Q322 | J-10 | ① |
| D724 | A-3 | ③ | Q323 | J-9 | ① | Q323 | J-9 | ① |
| IC | | | Q331 | C-11 | ① | Q331 | C-11 | ① |
| IC1 | B-8 | ③ | Q335 | D-6 | ① | Q335 | D-6 | ① |
| IC2 | B-9 | ③ | Q336 | D-6 | ① | Q336 | D-6 | ① |
| IC8 | E-11 | ③ | Q340 | D-6 | ① | Q340 | D-6 | ① |
| IC9 | E-13 | ③ | Q345 | C-11 | ① | Q345 | C-11 | ① |
| IC12 | C-9 | ③ | Q348 | C-10 | ① | Q348 | C-10 | ① |
| IC708 | A-3 | ③ | Q354 | C-11 | ① | Q354 | C-11 | ① |
| TRANSISTOR | | | Q356 | C-11 | ① | Q356 | C-11 | ① |
| Q2 | I-2 | ① | Q357 | C-10 | ① | Q357 | C-10 | ① |
| Q4 | G-4 | ① | Q358 | H-8 | ① | Q358 | H-8 | ① |
| Q5 | H-4 | ① | Q361 | D-6 | ① | Q361 | D-6 | ① |
| Q6 | G-4 | ① | Q363 | D-6 | ① | Q363 | D-6 | ① |
| Q8 | E-2 | ① | Q368 | D-6 | ① | Q368 | D-6 | ① |
| Q14 | F-3 | ① | Q373 | C-12 | ① | Q373 | C-12 | ① |
| Q15 | H-4 | ① | Q380 | E-6 | ① | Q380 | E-6 | ① |
| Q16 | H-4 | ① | Q381 | E-6 | ① | Q381 | E-6 | ① |
| Q17 | I-4 | ① | Q701 | D-4 | ① | Q701 | D-4 | ① |
| Q18 | H-4 | ① | Q702 | F-4 | ① | Q702 | F-4 | ① |
| Q19 | H-4 | ① | Q704 | F-5 | ① | Q704 | F-5 | ① |
| Q20 | G-4 | ① | Q705 | F-5 | ① | Q705 | F-5 | ① |
| Q22 | F-1 | ① | Q706 | F-6 | ① | Q706 | F-6 | ① |
| Q23 | H-4 | ① | Q707 | D-5 | ① | Q707 | D-5 | ① |
| Q24 | I-4 | ① | Q708 | F-5 | ① | Q708 | F-5 | ① |
| Q25 | H-4 | ① | Q709 | F-5 | ① | Q709 | F-5 | ① |
| Q26 | I-4 | ① | Q710 | F-6 | ① | Q710 | F-6 | ① |
| | | | Q714 | D-4 | ① | Q714 | D-4 | ① |
| | | | Q721 | D-3 | ① | Q721 | D-3 | ① |

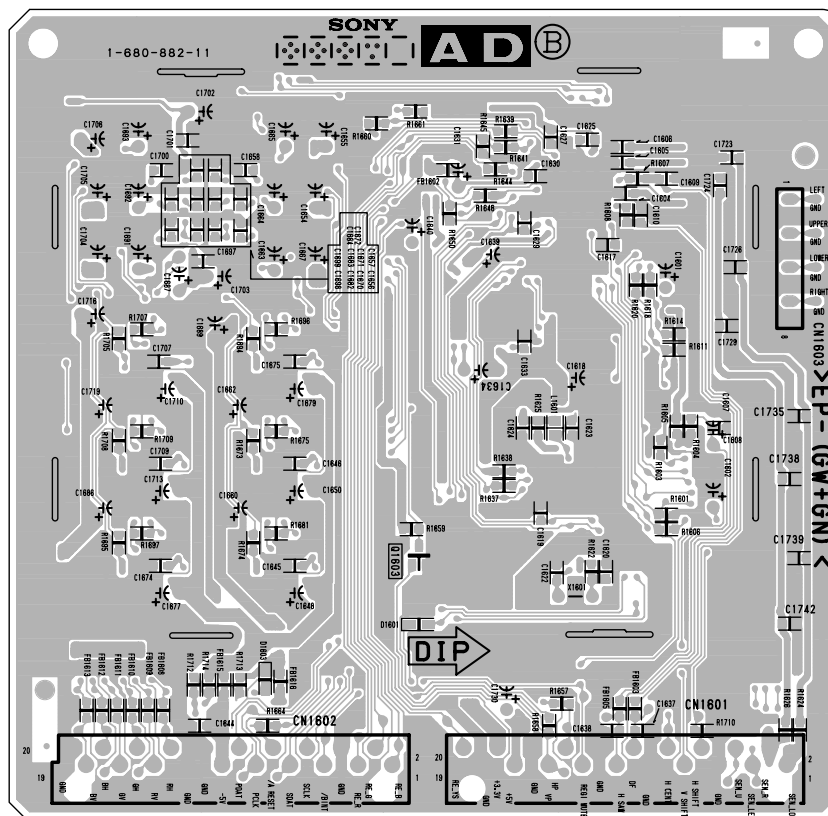


< Conductor Side >

– AD Board –



< Component Side >

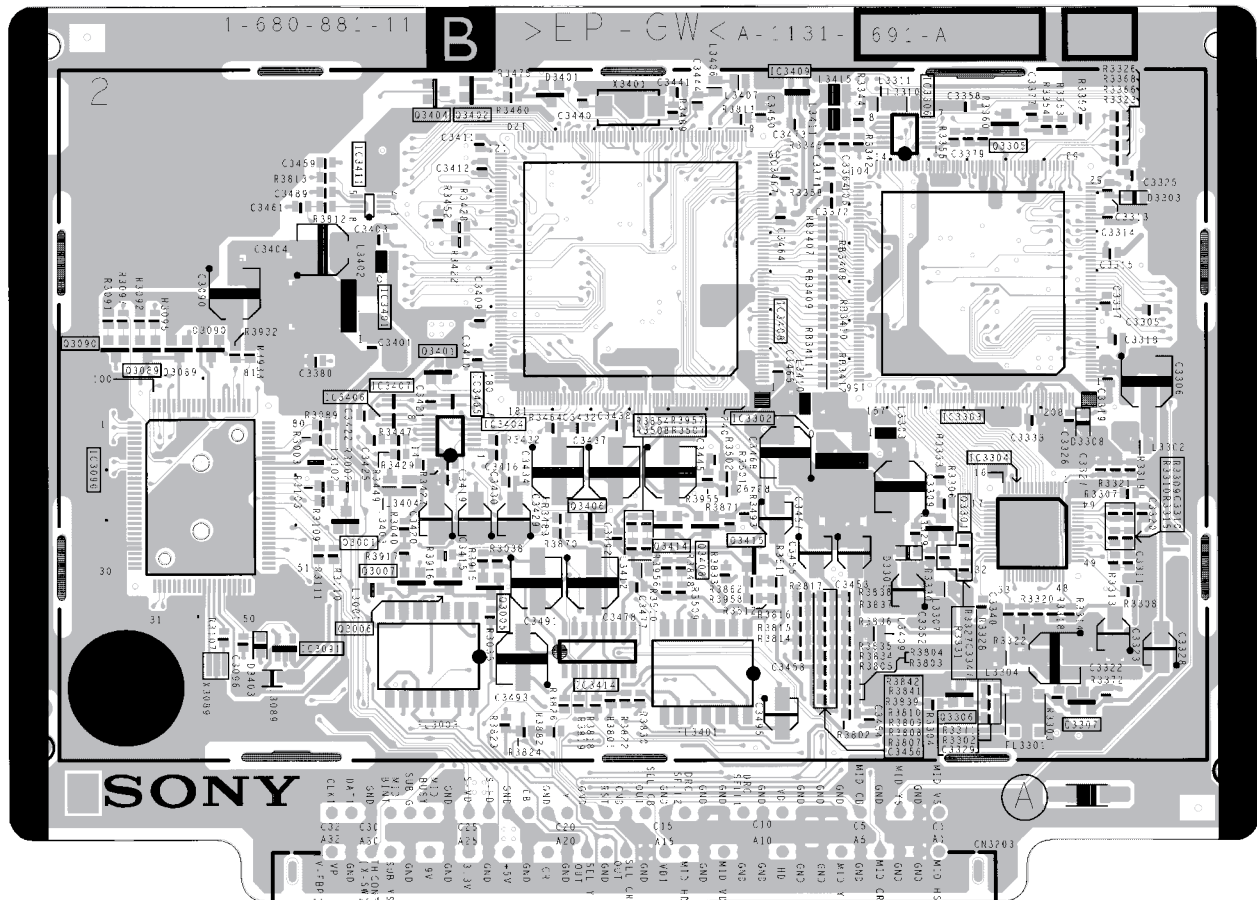


< Conductor Side >

B

[A/D CONVERTER, DRC, MULTI IMAGE DRIVER, MID-U CON, D/A CONVERTER]

– B Board –



< Component Side >

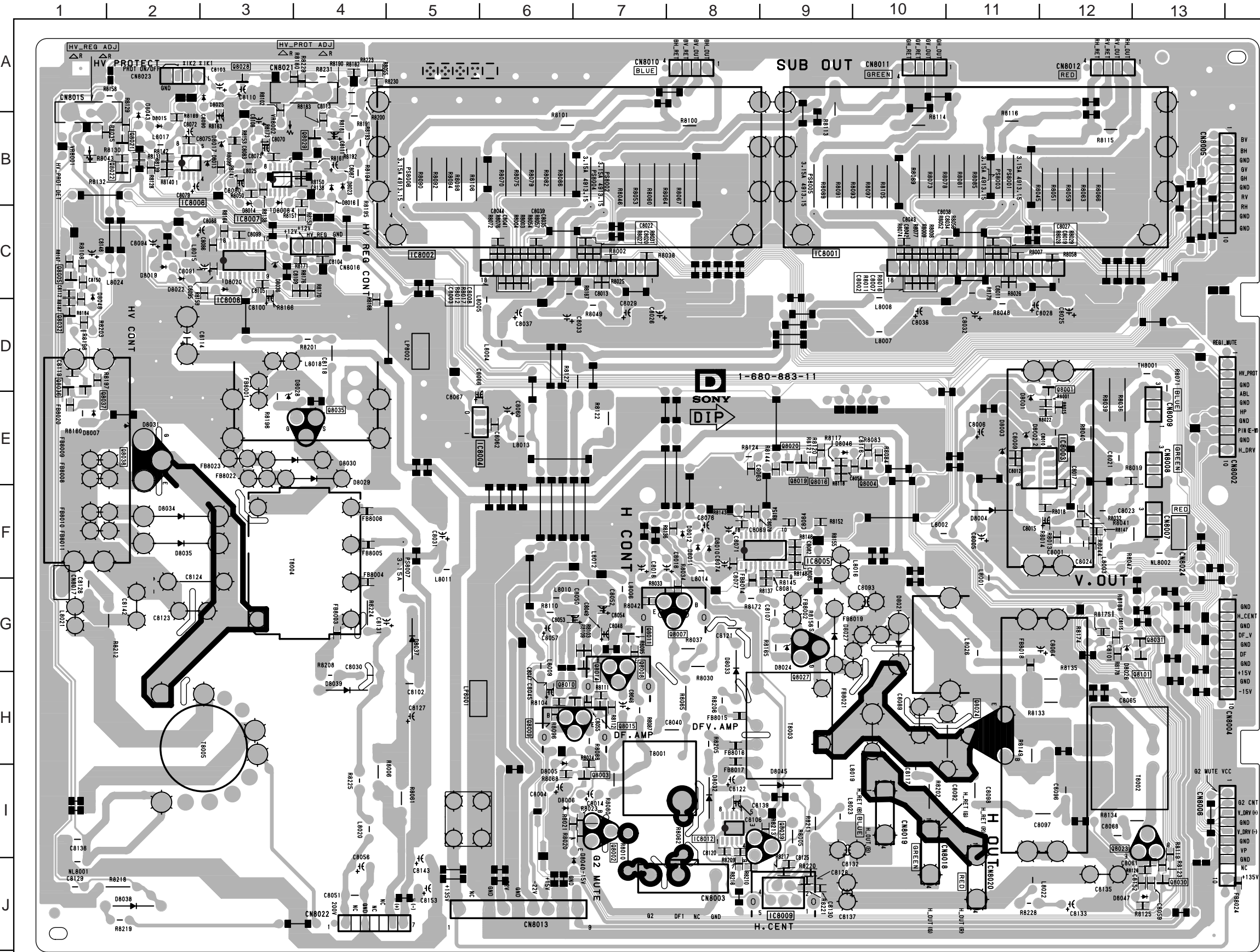
[CRT I/F RED]

D [HV DRIVE, POWER SUPPLY, H DRIVE]

– D Board –

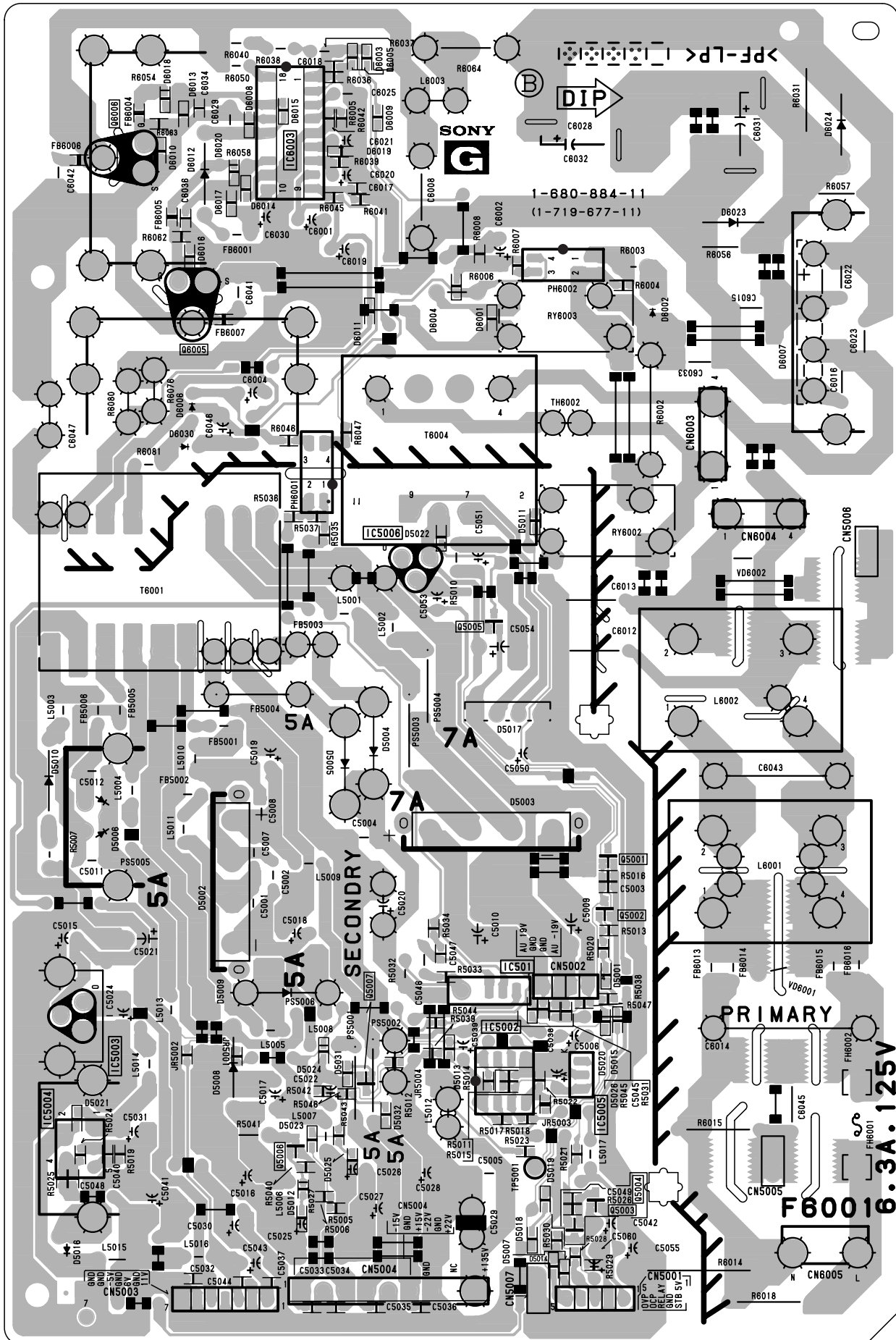
| DIODE | | * | TRANSISTOR * | | |
|-------|------|---|--------------|------|---|
| D8001 | E-11 | | Q8001 | E-12 | ① |
| D8002 | E-11 | | Q8002 | I-7 | |
| D8003 | E-11 | | Q8003 | I-7 | |
| D8004 | F-11 | | Q8004 | E-10 | ① |
| D8005 | H-6 | | Q8005 | C-1 | ① |
| D8006 | I-6 | | Q8007 | G-7 | |
| D8007 | E-1 | | Q8008 | H-7 | |
| D8008 | C-3 | | Q8009 | H-6 | |
| D8009 | E-11 | | Q8010 | H-7 | ① |
| D8010 | F-8 | | Q8011 | G-7 | ① |
| D8011 | F-8 | | Q8014 | G-7 | |
| D8012 | F-8 | | Q8015 | H-7 | ① |
| D8013 | B-3 | | Q8016 | E-9 | ① |
| D8014 | C-3 | | Q8019 | E-9 | ① |
| D8015 | B-2 | | Q8020 | E-9 | ① |
| D8016 | B-4 | | Q8021 | B-2 | ① |
| D8019 | C-2 | | Q8022 | B-2 | ① |
| D8020 | C-3 | | Q8023 | I-13 | |
| D8021 | G-10 | | Q8024 | H-11 | |
| D8022 | C-2 | | Q8027 | G-9 | |
| D8023 | B-4 | | Q8028 | A-3 | ① |
| D8024 | G-9 | | Q8029 | B-4 | ① |
| D8025 | A-3 | | Q8030 | J-13 | ① |
| D8026 | G-12 | | Q8031 | G-13 | ① |
| D8027 | G-9 | | Q8032 | D-1 | ① |
| D8028 | E-3 | | Q8035 | I-4 | |
| D8029 | E-4 | | Q8036 | E-1 | ① |
| D8030 | E-4 | | Q8037 | E-1 | ① |
| D8031 | E-2 | | Q8038 | E-2 | |
| D8032 | I-8 | | Q8039 | I-9 | |
| D8033 | H-8 | | Q8101 | G-13 | ① |
| D8034 | F-2 | | | | |
| D8035 | F-2 | | | | |
| D8036 | C-3 | | | | |
| D8037 | G-5 | | | | |
| D8038 | J-2 | | | | |
| D8039 | H-4 | | | | |
| D8043 | B-2 | | | | |
| D8045 | I-9 | | | | |
| D8046 | E-9 | | | | |
| D8047 | J-13 | | | | |

| IC | | |
|--------|------|--|
| IC8001 | C-11 | |
| IC8002 | C-6 | |
| IC8003 | E-12 | |
| IC8004 | E-5 | |
| IC8005 | F-9 | |
| IC8006 | B-2 | |
| IC8007 | B-3 | |
| IC8008 | C-3 | |
| IC8009 | J-9 | |
| IC8012 | I-8 | |



< Conductor Side >

- G Board -



H1

[POWER SWITCH]

H2

[FUNCTION KEK]

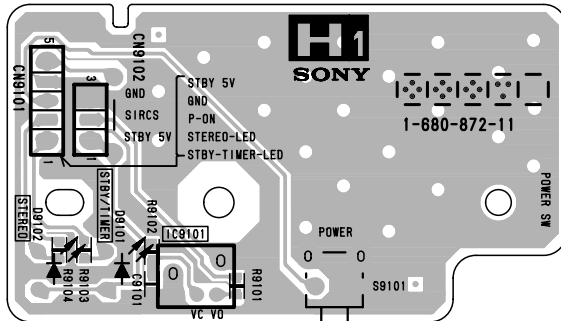
H3

[VIDEO 2 INPUT]

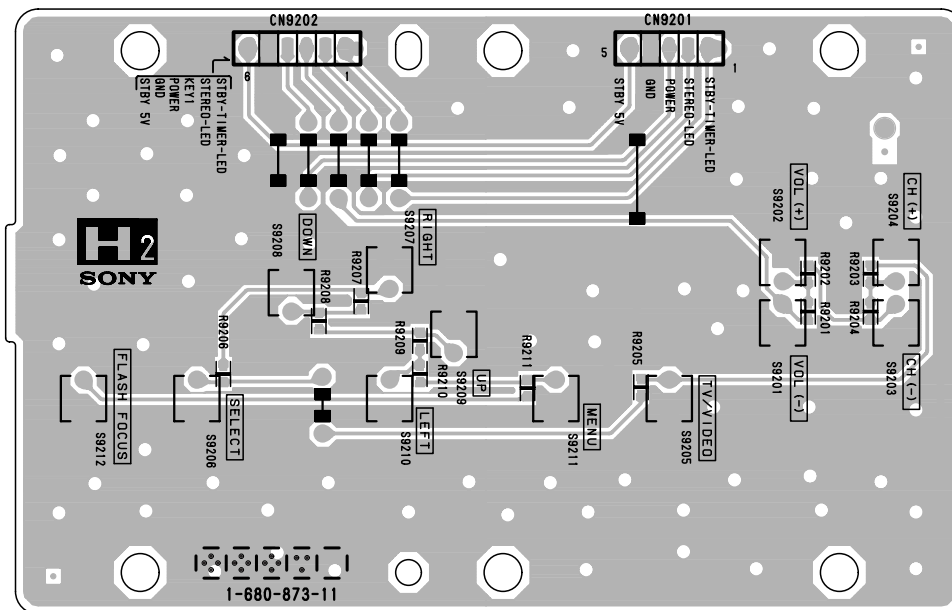
H4

[REMOTE CONTROL RECEIVER]

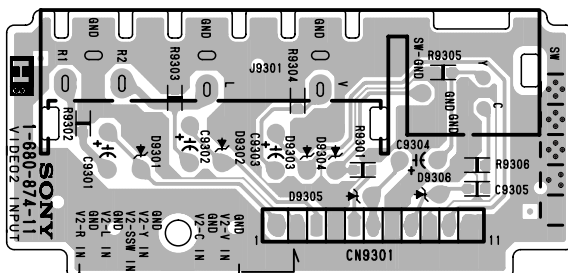
– H1 Board –



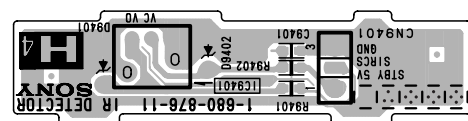
– H2 Board –



– H3 Board –

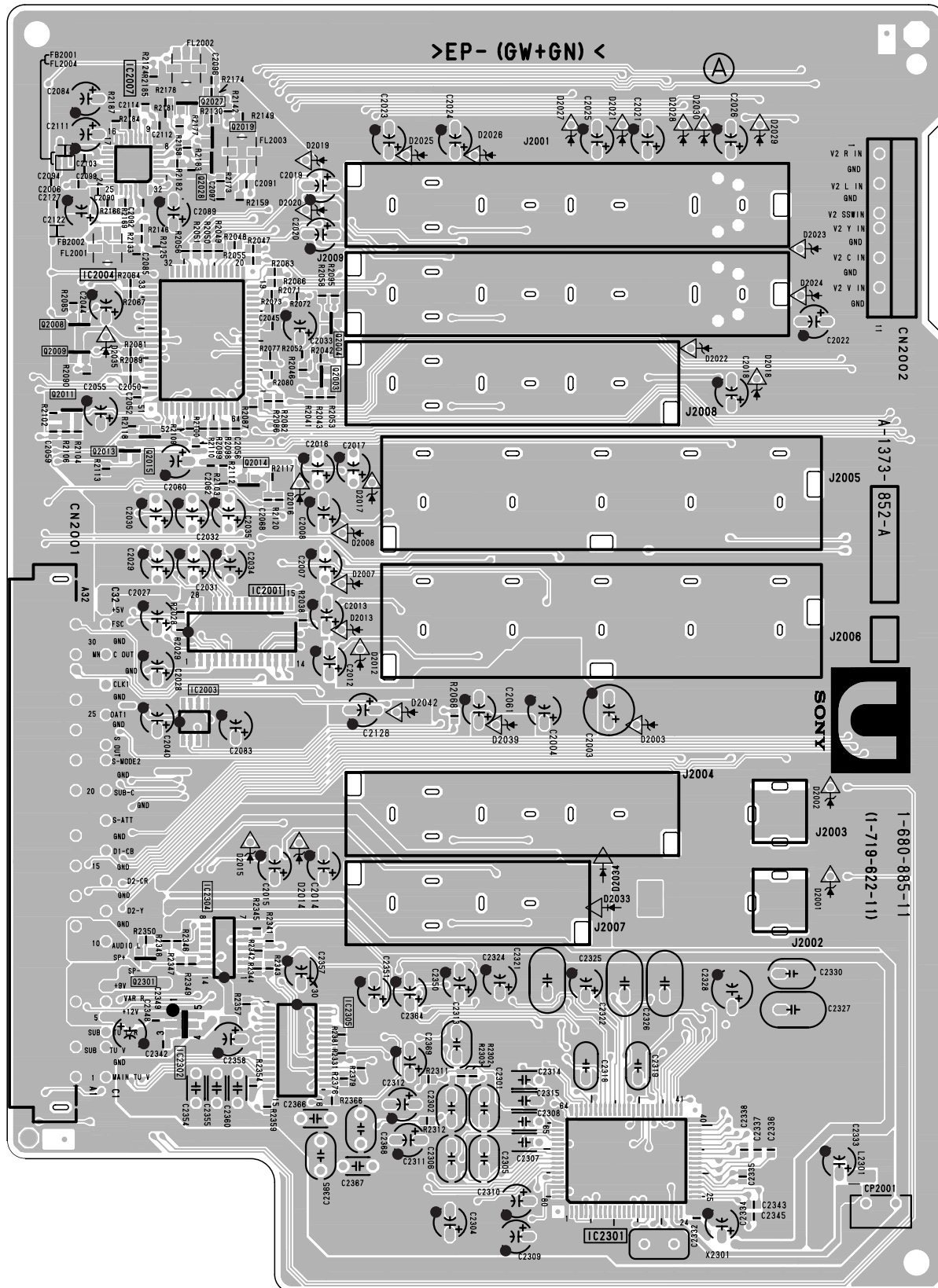


– H4 Board –



[VIDEO, AUDIO INPUT/OUTPUT, AV SWITCH, AUDIO PROCESSOR]

– U Board –

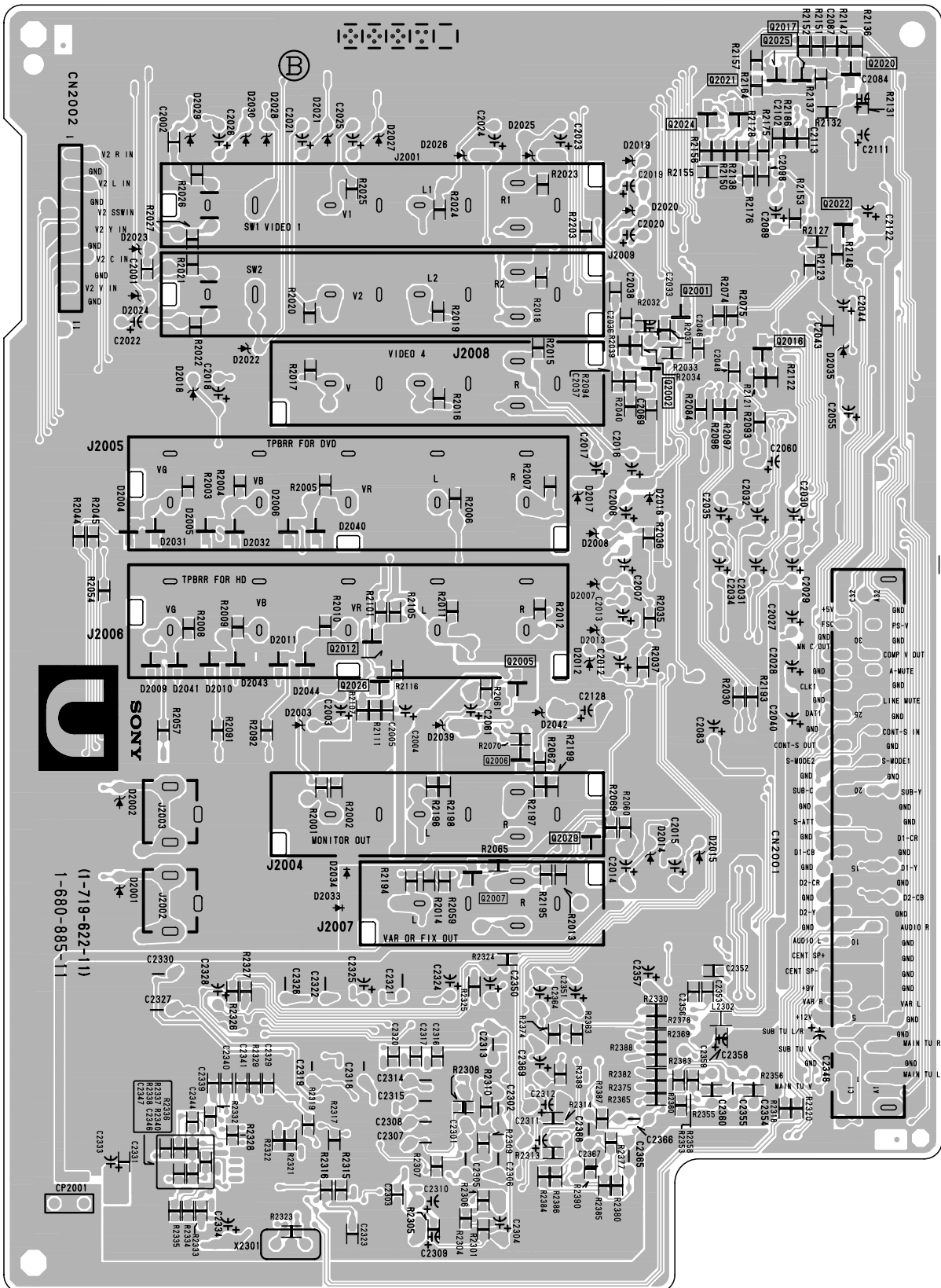


< Component Side >

U

[VIDEO, AUDIO INPUT/OUTPUT, AV SWITCH, AUDIO PROCESSOR]

- U Board -

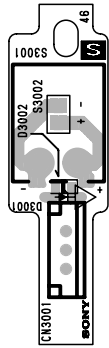


< Conductor Side >

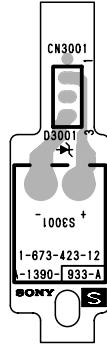
S [SENSOR]

V [SPEED MODULATION]

– S Board –

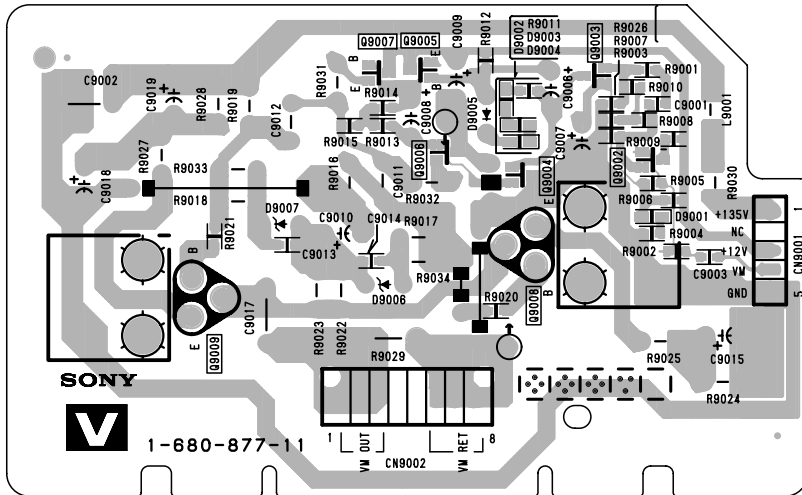


< Component Side >



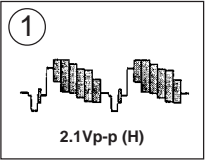
< Conductor Side >

– V Board –

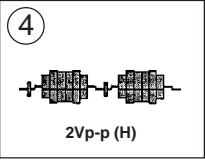
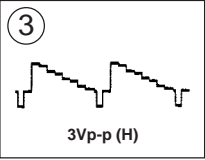
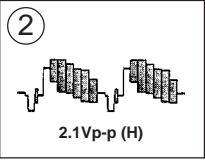


6-5. WAVEFORMS

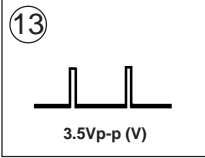
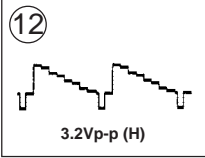
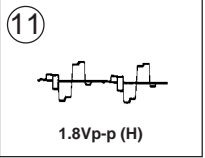
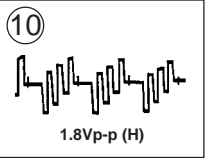
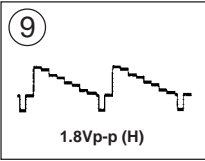
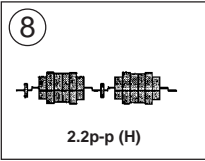
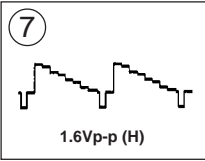
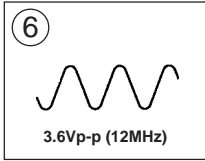
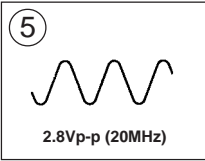
• A(1/9) BOARD WAVEFORMS



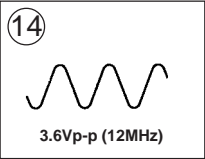
• A(2/9) BOARD WAVEFORMS



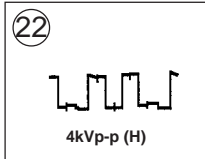
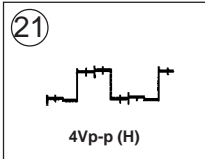
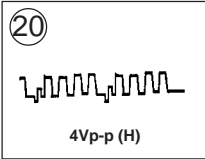
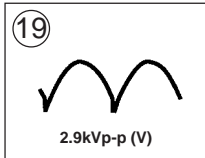
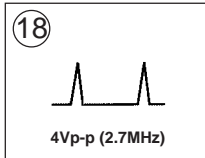
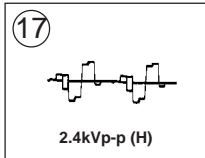
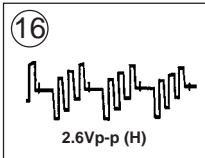
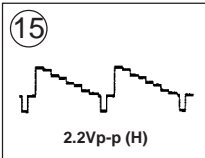
• A(3/9) BOARD WAVEFORMS



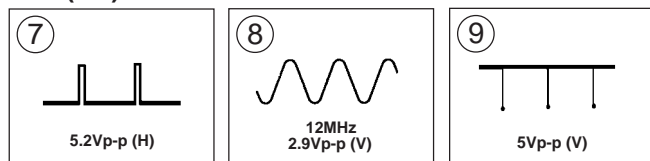
• A(4/9) BOARD WAVEFORMS



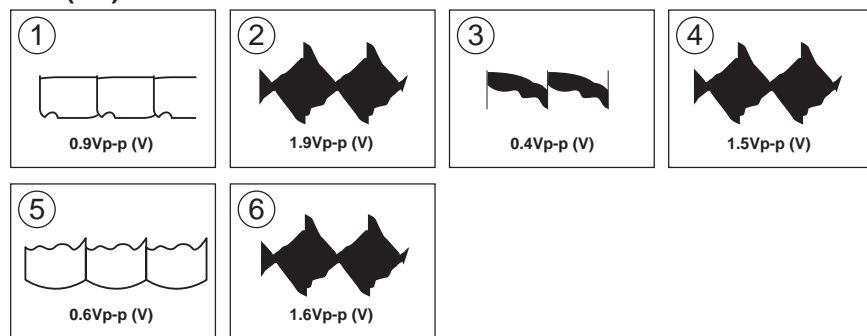
• A(5/9) BOARD WAVEFORMS



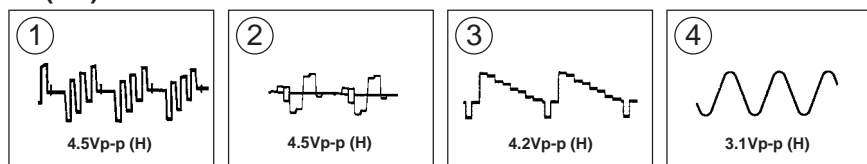
• AD(1/2) BOARD WAVEFORMS



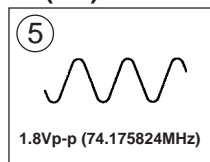
• AD(2/2) BOARD WAVEFORMS



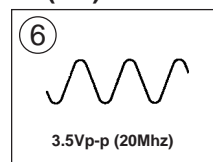
• B(1/4) BOARD WAVEFORMS



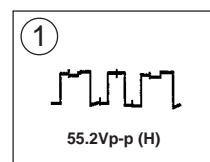
• B(3/4) BOARD WAVEFORMS



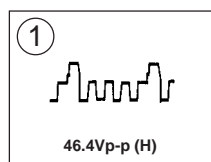
• B(4/4) BOARD WAVEFORMS



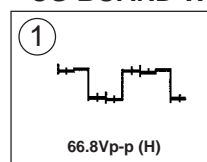
• CR BOARD WAVEFORM



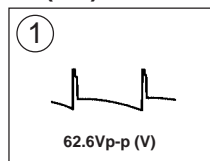
• CB BOARD WAVEFORM



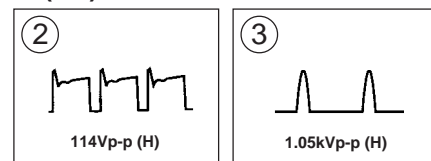
• CG BOARD WAVEFORMS



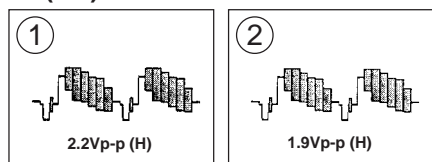
• D(1/3) BOARD WAVEFORMS



• D(3/3) BOARD WAVEFORMS

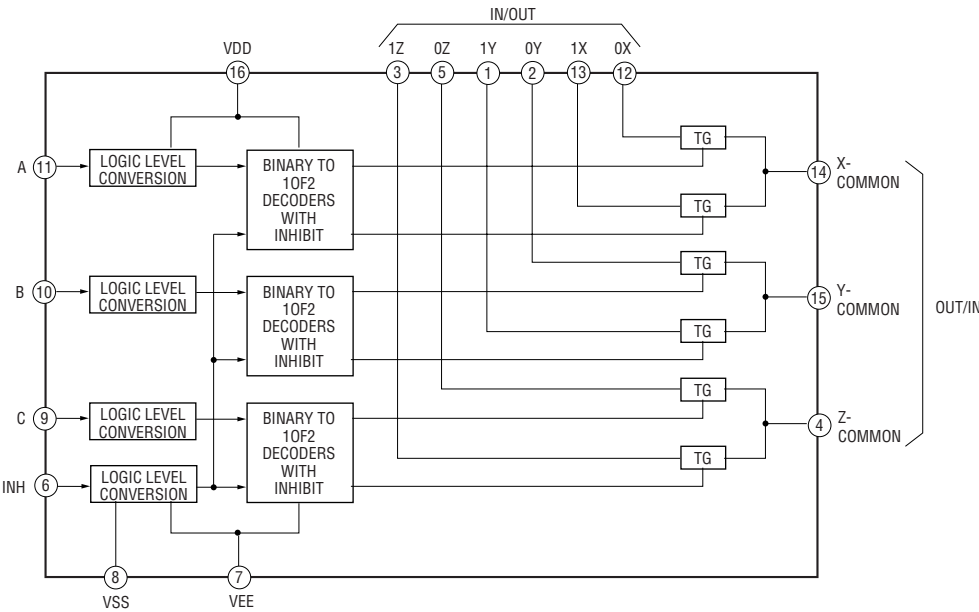


• U(2/3) BOARD WAVEFORMS

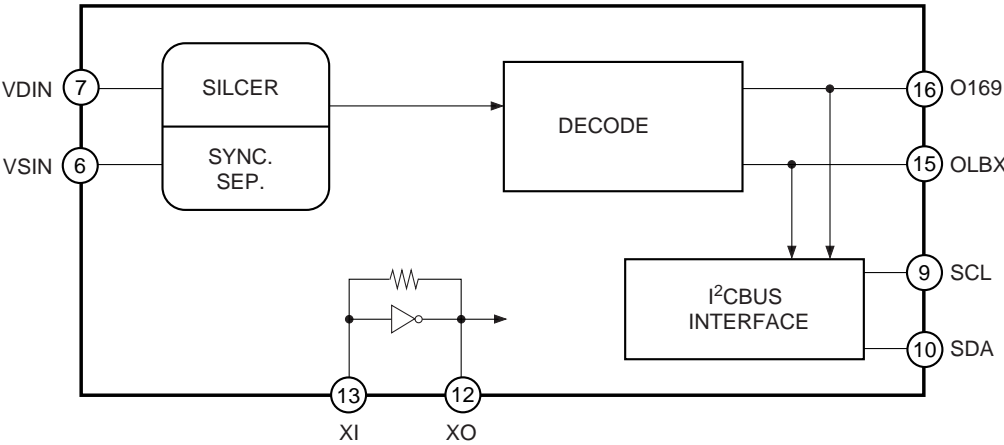


6-6. IC BLOCK DIAGRAMS

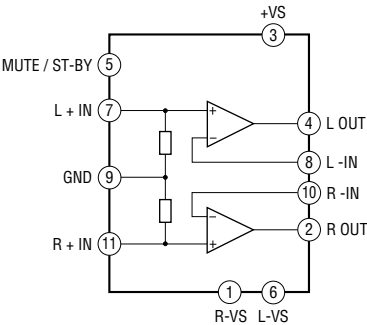
A BOARD : IC305, 307 SN74LV4053ANSR



A BOARD : IC308 CXD2085M

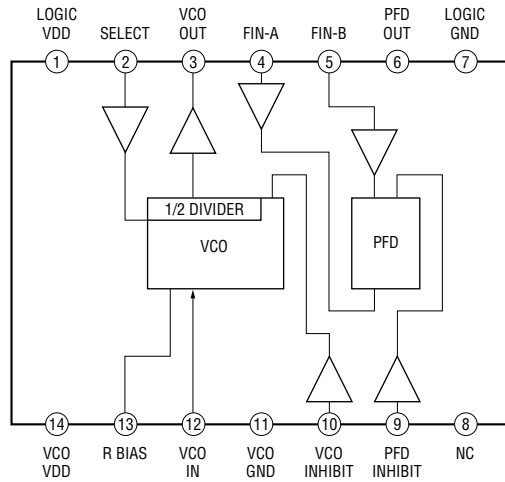


A BOARD : IC708 TDA7265

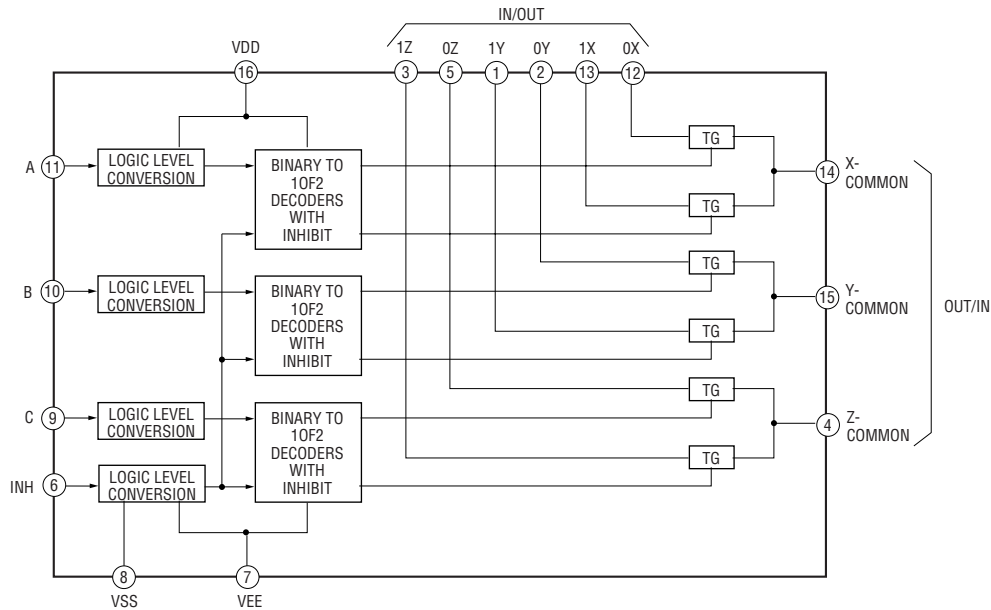


B BOARD : IC3305, 3404 TLC2932IPWR

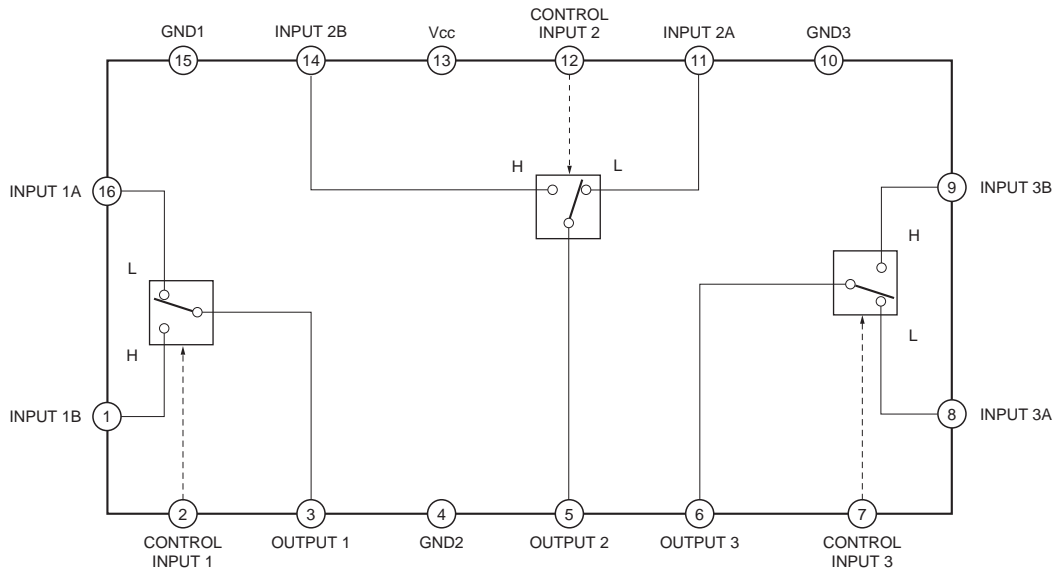
KP-43HT20/53HS20/53HS30/61HS20/61HS30
 RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908



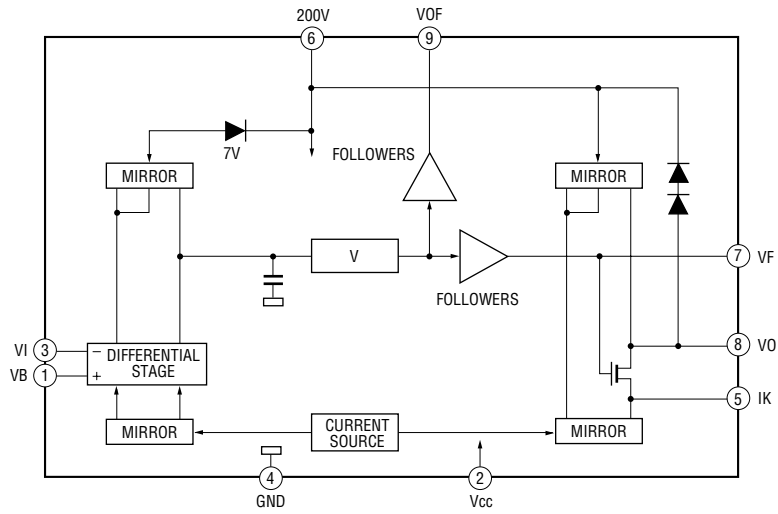
B BOARD : IC3413 SN74LV4053ANSR



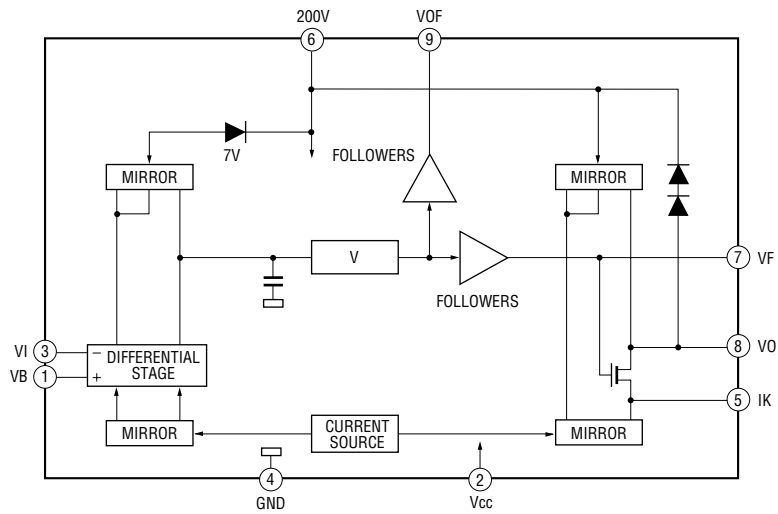
B BOARD : IC3414 M52055P



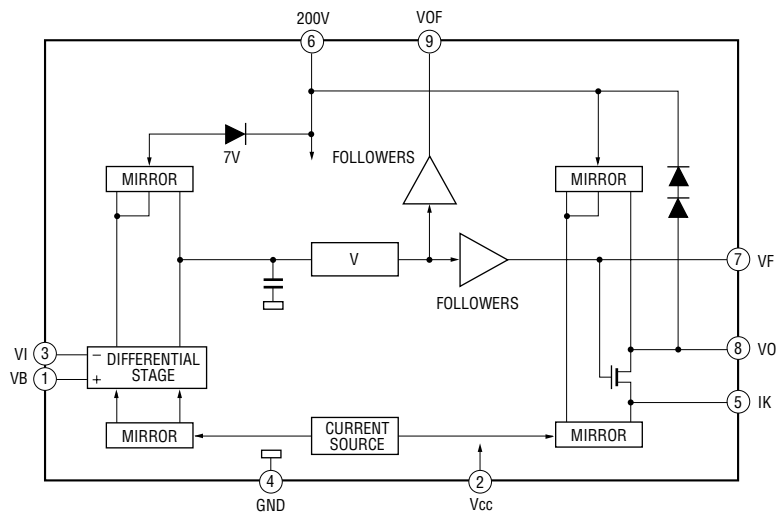
CR BOARD : IC7101 TDA611Q/N4

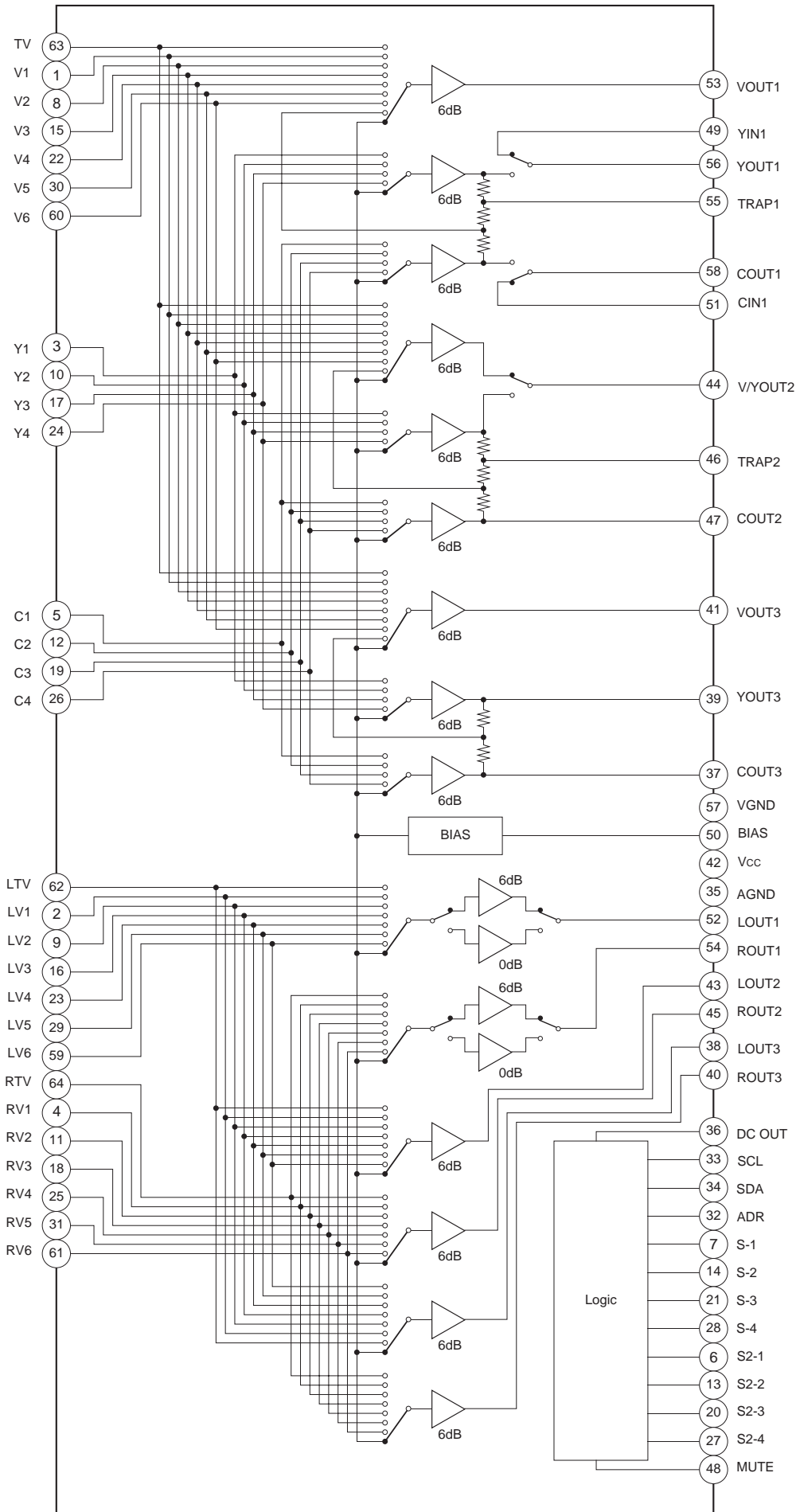


CG BOARD : IC7201 TDA611Q/N4



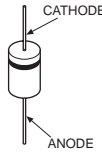
CB BOARD : IC7301 TDA611Q/N4



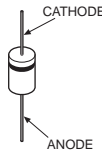


6-7. SEMICONDUCTORS

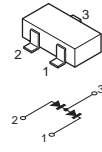
1SS83TD
21DP05
D1NL40-TR2
D1NS4
D2L20U
EL1Z
GP08DPKG23
RD10ES-B2
RD15ES-B2
RD18ES-B2
RD20ES-B2
RD5.6ES-B2
RGP02-17EL-6433
UF4005PKG23



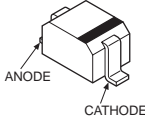
1SS133T-77
30DF4N-FC5
ERC04-06SE
ERC91-02



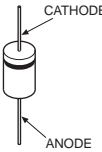
1SS226



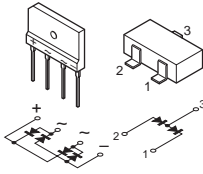
1S355TE-17
DTZ-10B
DTZ-TT11-6.8B
UDZS-TE-17-7.5B
UDZ-TE-17-10B
UDZS-TE-17-18B
UDZS-TE-17-22B
UDZS-TE-17-24B
UDZS-TE-17-3.9B
UDZS-TE-17-33B
UDZS-TE-17-4.7B
UDZS-TE-17-5.1B
UDZS-TE-17-5.6B
UDZS-TE-17-6.2B
UDZS-TE-17-9.1B



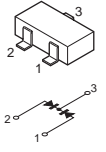
D1NL20U-TR



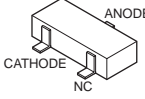
D4SBS4-F
D6SB60L



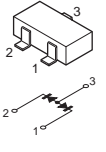
DAN202K-T-146



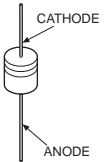
DAN202U



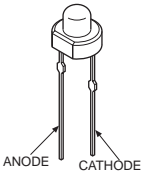
DAP202K



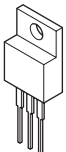
MTZJ-T-77-13
MTZJ-T-77-22B



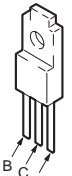
SLR-325VCT31



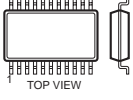
BA033T
NJM7812FA
TA7812S



BA05T

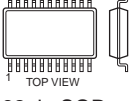


BA9759F-E2



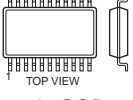
18pin SOP

BH3868BFS-E2



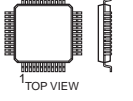
32pin SOP

CD0031AM



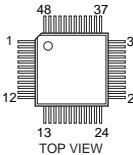
48pin SOP

CM0017AF

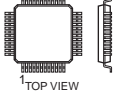


120pin QFP

CXA2151Q
CXD2013Q-T6

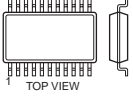


CXD2073Q-T4



32pin QFP

CXD2085M
PCM56P-L
SN74LV4053ANSR



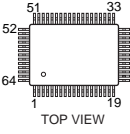
16pin SOP

CXA1726AM
NJM2180M

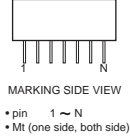


30pin SOP

CXA2069Q
CXP85840A-039Q
CXP86448-635Q
CX2150AQ

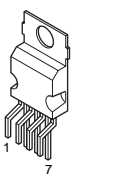


DM-58

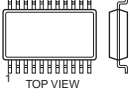


14pin DIP

LA78045

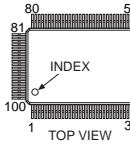


M24C08-MN6T
M24C32-WMN6T
NJM2068V
NJM2904M
UPC4558G2

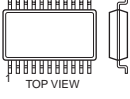


8pin SOP

M306V2ME-175FP
UPD64082GF-3BA

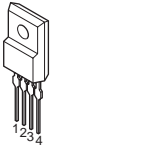


MSM514265C-60JS



40pin SOP

NJM2395AF05
PQ09RF21

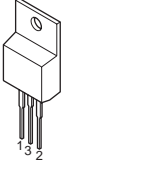


NJM2903M
UPC393C

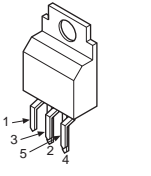


8pin DIP

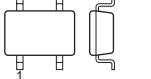
NJM7905FA



PQ1CG2032FZ

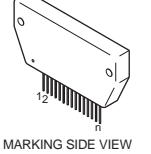


PST9143NL
PST9145NL

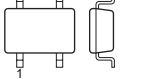


5pin CHIP

STK392-560

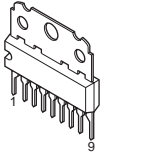


TC7W08FU(TE12R)

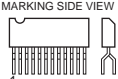


8pin CHIP

TDA6111Q / N4

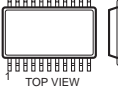


TDA7265



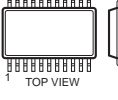
11pin ZIP

TEA6422DT



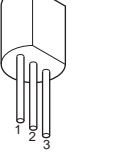
28pin SOP

TLC2933IPWR

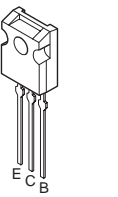


14pin SOP

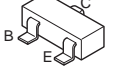
UPC1093J-1-T



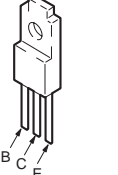
2SA1358-Y
2SA3421-Y



2SA1037AK-T146R
2SA1226-T1E3E4
2SC1623-L516
2SD601A-QRS-TX
DTC114EKA-T146
DTC144EKA-T146



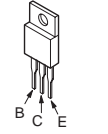
2SA2005
2SC5511



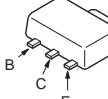
2SC2688-LK



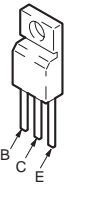
2SC4634LS-CB11



2SK2036(TE85L)




IRFIB7N50A




SECTION 7

EXPLODED VIEWS

- NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service
 - The construction parts of an assembled part are indicated with a collation number in the remark column.
 - Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

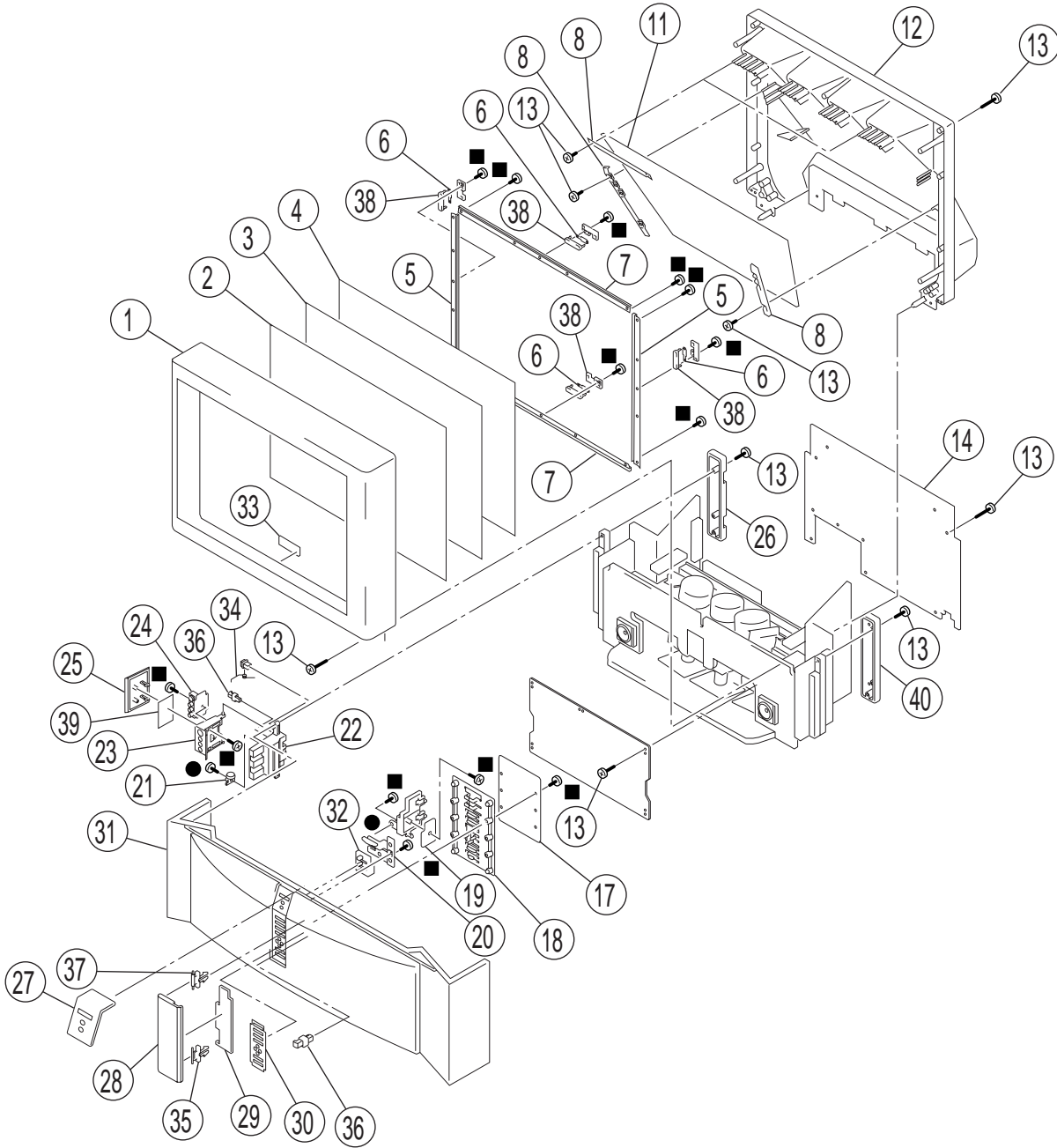
The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-1. COVER (KP-43HT20)

● : +BVTP 3X12 7-685-648-79

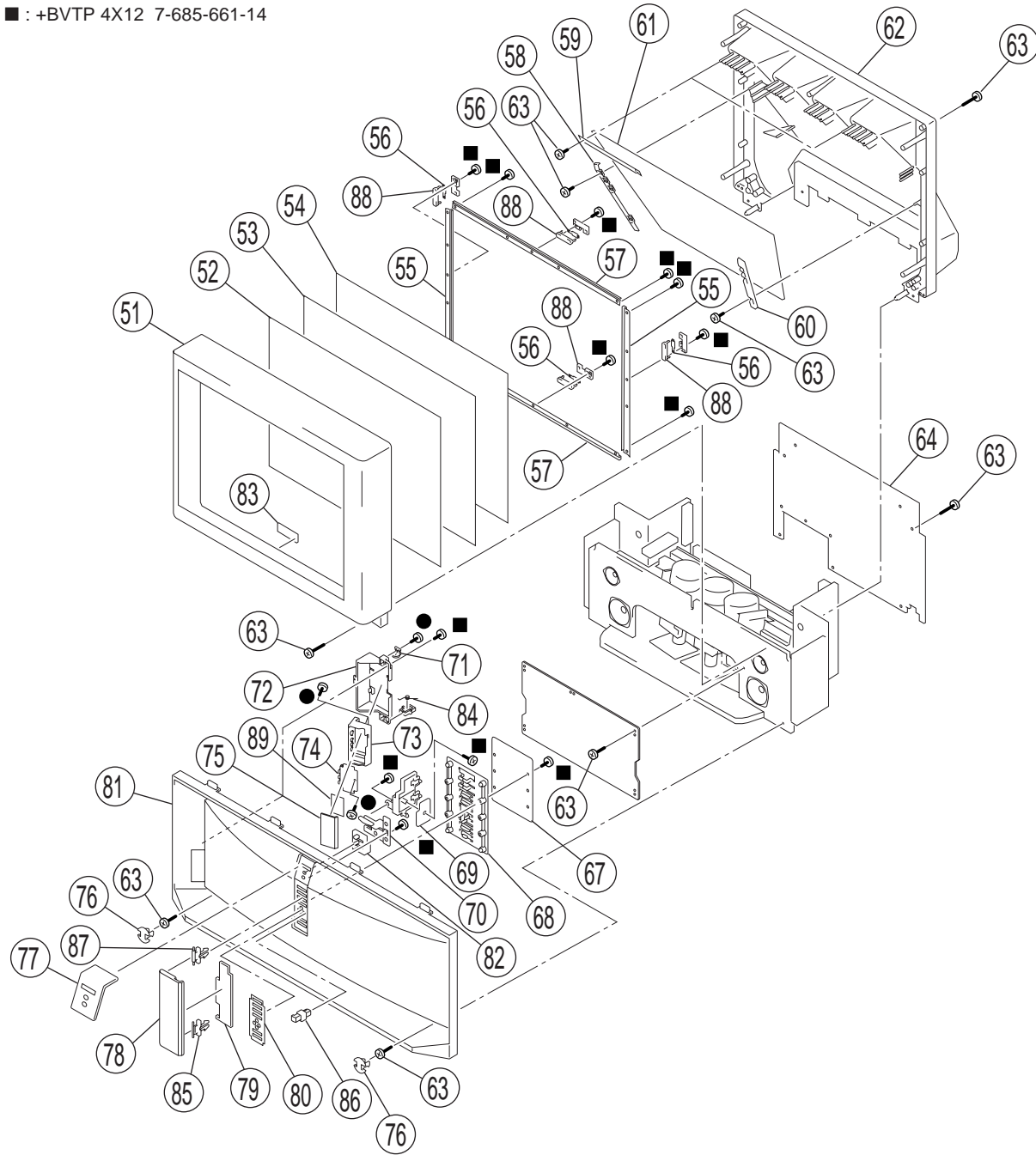
■ : +BVTP 4X12 7-685-661-14



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|----------------|--------------------------------|--------|----------|----------------|-------------------------|--------|
| 1 | X-4038-924-1 | BEZNET (43) ASSY | | 25 | 4-082-300-11 | DOOR, SIDE TERMINAL | |
| 2 | 4-081-064-11 | SCREEN (43), CONTRAST | | 26 | 4-082-298-01 | CAP (L), SPEAKER GRILLE | |
| 3 | 4-070-284-11 | PLATE (L), DIFFUSION | | 27 | 4-082-280-11 | PANEL, FRONT | |
| 4 | 4-070-285-11 | PLATE (43F), DIFFUSION | | 28 | 4-082-281-11 | DOOR, CONTROL | |
| 5 | * 4-070-333-21 | HOLDER (S), SCREEN NC | | 29 | 4-082-282-01 | COVER, CONTROL DOOR | |
| 6 | * A-1391-148-A | S BOARD, COMPLETE | | 30 | 4-082-291-01 | LABEL, CONTROL | |
| 7 | * 4-070-332-31 | HOLDER (L), SCREEN NC | | 31 | X-4039-087-1 | GRILLE ASSY, SPEAKER | |
| 8 | * 4-081-501-01 | HOLDER, MIRROR | | 32 | 4-082-286-01 | GUIDE, LED | |
| 11 | 4-082-889-01 | MIRROR (43) | | 33 | * A-1372-934-A | H4 BOARD, COMPLETE | |
| 12 | * 4-081-500-01 | COVER (43), MIRROR | | 34 | 4-083-694-01 | SPRING, DOOR | |
| 13 | 4-081-063-01 | SCREW,DOME WASHER HEX TAP 4X20 | | 35 | 3-703-035-11 | SHAFT, LID | |
| 14 | * 4-083-696-01 | BOARD, REAR | | 36 | 4-042-192-01 | CATCHER, PUSH | |
| 17 | * A-1372-932-A | H2 BOARD, COMPLETE | | 37 | 4-045-250-01 | DAMPER | |
| 18 | 4-082-284-01 | BUTTON, MULTI | | 38 | * 4-069-680-01 | BRACKET (B), SENSOR | |
| 19 | * A-1377-001-A | H1 BOARD, COMPLETE | | 39 | 4-082-290-01 | LABEL, FRONT TERMINAL | |
| 20 | 4-082-283-01 | BUTTON, POWER | | 40 | 4-082-299-01 | CAP (R), SPEAKER GRILLE | |
| 21 | 4-919-393-01 | DAMPER | | | | | |
| 22 | 4-082-302-01 | HOLDER, SIDE TERMINAL | | | | | |
| 23 | 4-082-301-01 | BRACKET, H3 | | | | | |
| 24 | * A-1372-933-A | H3 BOARD, COMPLETE | | | | | |

7-2. COVER
(KP-53HS20/HS30/61HS20/HS30)

● : +BVTP 3X12 7-685-648-79
■ : +BVTP 4X12 7-685-661-14



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|----------------|---|--------|----------|----------------|-------------------------------------|--------|
| 51 | X-4038-910-3 | BEZNET ASSY (61) (61HS20,61HS30) | | 67 | * A-1372-932-A | H2 BOARD, COMPLETE | |
| | X-4038-921-1 | BEZNET (53) ASSY (53HS30) | | 68 | 4-082-284-01 | BUTTON, MULTI | |
| | X-4039-160-1 | BEZNET (53) ASSY (53HS20) | | 69 | * A-1377-001-A | H1 BOARD, COMPLETE | |
| 52 | 4-081-065-11 | SCREEN (53), CONTRAST (53HS20,53HS30) | | 70 | 4-082-283-01 | BUTTON, POWER | |
| | 4-081-067-11 | SCREEN (61), CONTRAST (61HS20,61HS30) | | 71 | 4-919-393-01 | DAMPER | |
| 53 | 4-070-283-11 | PLATE (L), DIFFUSION (61HS20,61HS30) | | 72 | 4-082-289-01 | HOLDER, FRONT TERMINAL | |
| | 4-070-525-01 | PLATE (L), DIFFUSION (53HS20,53HS30) | | 73 | 4-082-288-01 | BRACKET, H3 | |
| 54 | 4-084-702-11 | PLATE (F), DIFFUSION (53HS20,53HS30) | | 74 | * A-1372-933-A | H3 BOARD, COMPLETE | |
| | 4-084-704-11 | PLATE (61FV), DIFFUSION (61HS20,61HS30) | | 75 | 4-082-287-11 | DOOR, FRONT TERMINAL(53HS30,61HS30) | |
| 55 | * 4-070-330-02 | HOLDER (S), SCREEN YC (53HS30) | | | 4-082-287-21 | DOOR, FRONT TERMINAL(53HS20,61HS20) | |
| | * 4-070-333-01 | HOLDER (S), SCREEN NC (53HS20) | | | | | |
| | * 4-070-334-02 | HOLDER (S), SCREEN YC (61HS30) | | 76 | 4-083-503-01 | SCREW CAP, GRILLE | |
| | * 4-070-335-01 | HOLDER (S), SCREEN NC (61HS20) | | 77 | 4-082-280-01 | PANEL, FRONT | |
| 56 | * A-1391-148-A | S BOARD, COMPLETE | | 78 | 4-082-281-01 | DOOR, CONTROL | |
| 57 | * 4-070-328-12 | HOLDER (L), SCREEN YC (53HS30) | | 79 | 4-082-282-01 | COVER, CONTROL DOOR | |
| | * 4-070-329-03 | HOLDER (L), SCREEN YC (61HS30) | | 80 | 4-082-291-01 | LABEL, CONTROL | |
| | * 4-070-331-11 | HOLDER (L), SCREEN NC (53HS20) | | | | | |
| | * 4-070-332-02 | HOLDER (L), SCREEN NC (61HS20) | | 81 | X-0540-033-1 | GRILLE ASSY, SPEAKER (61HS20) | |
| 58 | * 4-069-689-01 | HOLDER (L), MIRROR (61HS20,61HS30) | | | X-4039-048-1 | GRILLE ASSY, SPEAKER (53HS30) | |
| | * 4-081-504-01 | HOLDER (SL), MIRROR (53HS20,53HS30) | | | X-4039-085-1 | GRILLE ASSY, SPEAKER (61HS30) | |
| 59 | * 4-070-345-01 | HOLDER (TOP), MIRROR (61HS20,61HS30) | | | X-4039-148-1 | GRILLE ASSY, SPEAKER (53HS20) | |
| | * 4-070-345-11 | HOLDER (TOP), MIRROR (53HS20,53HS30) | | 82 | 4-082-286-01 | GUIDE, LED | |
| 60 | * 4-069-690-01 | HOLDER (R), MIRROR (61HS20,61HS30) | | 83 | * A-1372-934-A | H4 BOARD, COMPLETE | |
| | * 4-081-505-01 | HOLDER (SR), MIRROR (53HS20,53HS30) | | 84 | 4-083-694-01 | SPRING, DOOR | |
| 61 | 4-070-344-01 | MIRROR, REFLECTION (53HS20,53HS30) | | 85 | 3-703-035-11 | SHAFT, LID | |
| | 4-070-922-01 | MIRROR, REFLECTION (61HS20,61HS30) | | 86 | 4-042-192-01 | CATCHER, PUSH | |
| 62 | * 4-069-695-01 | COVER, MIRROR (61HS20,61HS30) | | 87 | 4-045-250-01 | DAMPER | |
| | * 4-081-503-01 | COVER, MIRROR (53HS20,53HS30) | | 88 | * 4-069-680-01 | BRACKET (B), SENSOR | |
| 63 | 4-081-063-01 | SCREW,DOME WASHER HEX TAP 4X20 | | 89 | 4-082-290-01 | LABEL, FRONT TERMINAL | |
| 64 | * 4-083-511-01 | BOARD, REAR (53HS20,53HS30) | | | | | |
| | * 4-083-686-01 | BOARD, REAR (61HS20,61HS30) | | | | | |

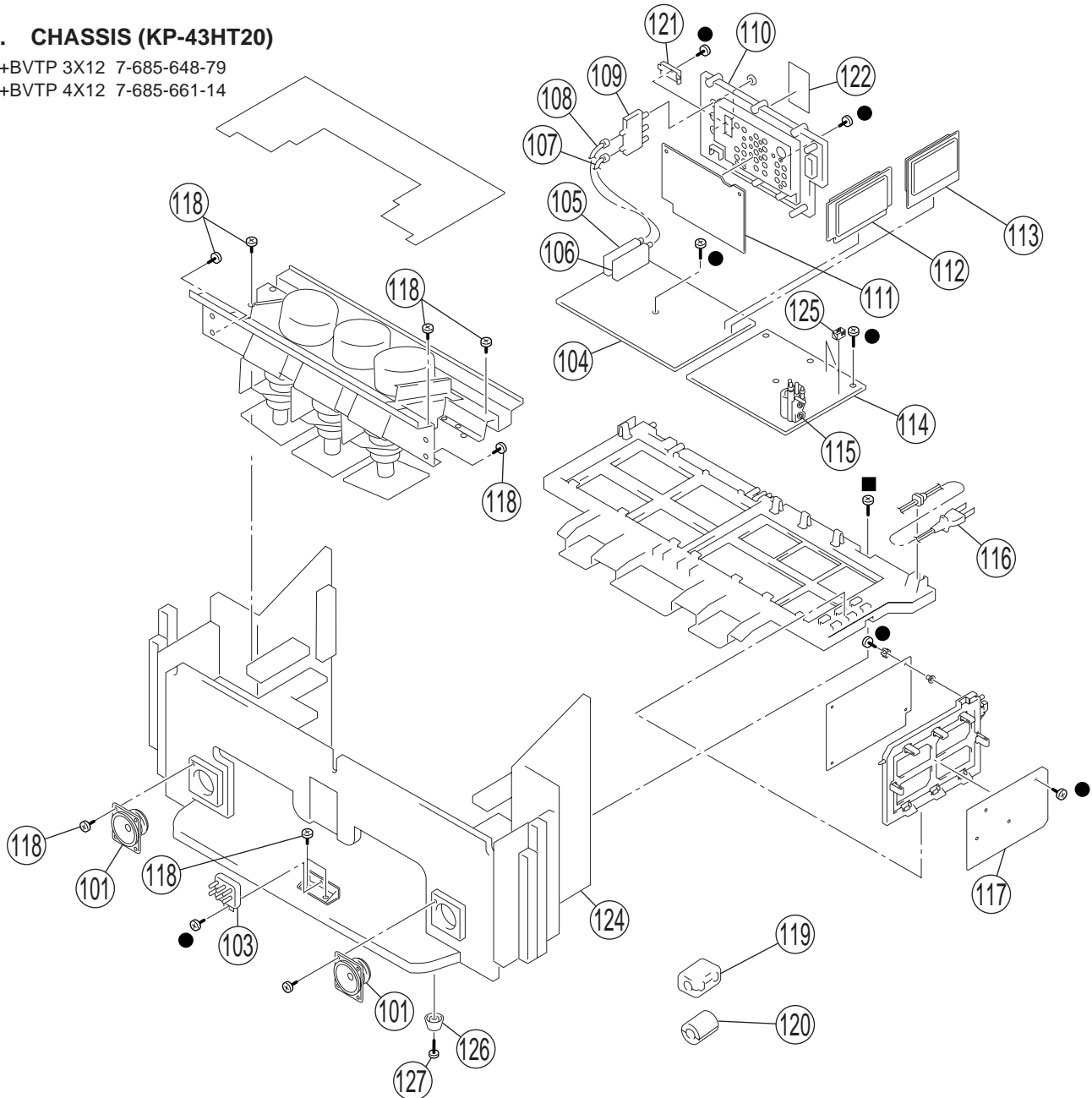
Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

7-3. CHASSIS (KP-43HT20)

● : +BVTP 3X12 7-685-648-79

■ : +BVTP 4X12 7-685-661-14

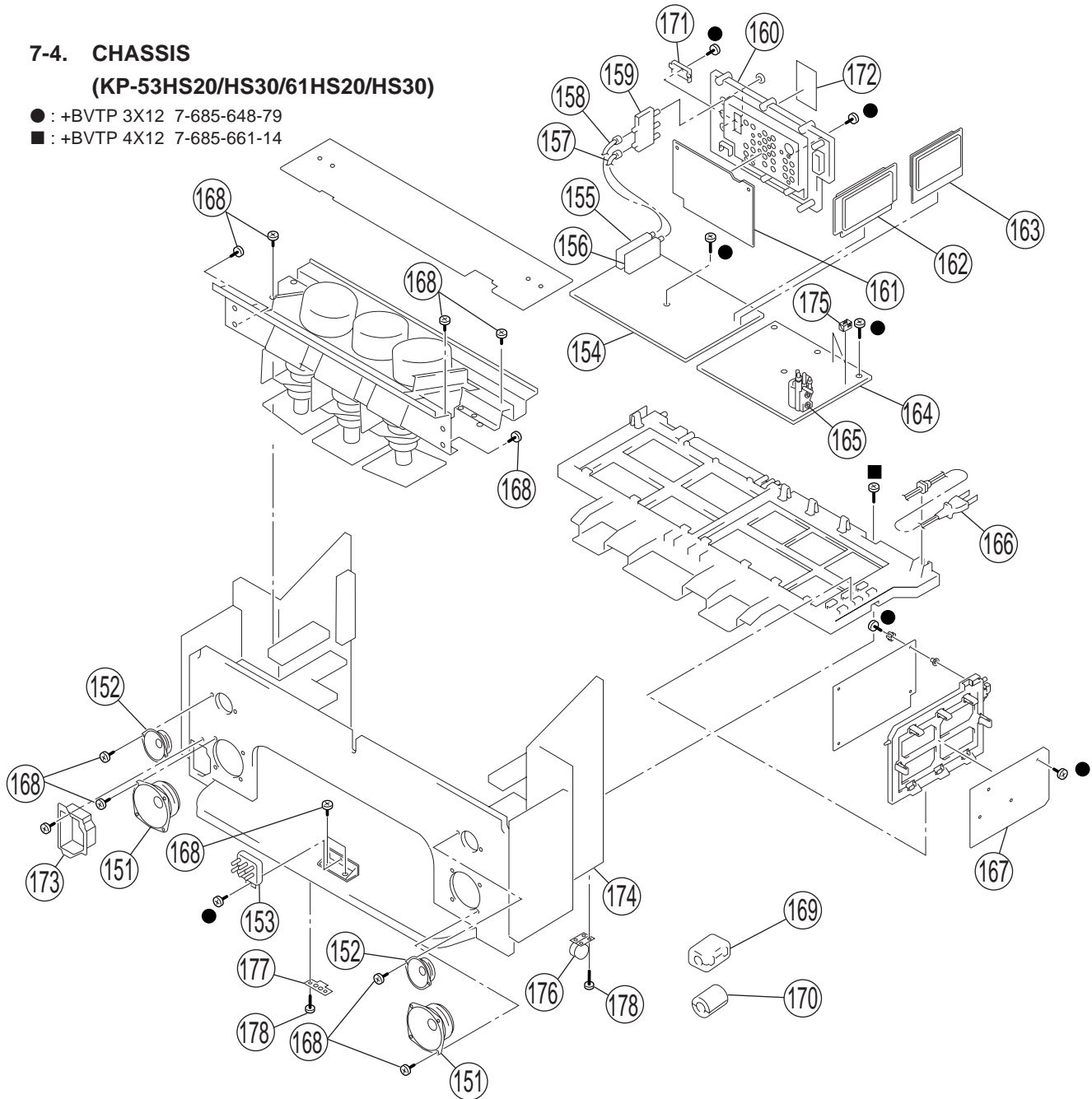


| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|-----------------------|----------------------------|--------|----------|-----------------------|---------------------------------|--------|
| 101 | 1-544-893-11 | SPEAKER (10CM) | | 114 | * A-1348-038-A | D BOARD, COMPLETE | |
| 103 | Δ 1-223-925-11 | RESISTOR ASSY (FOCUS PACK) | | 115 | Δ 1-453-285-21 | FBT ASSY, NX-4006//X4P4 (T8005) | |
| 104 | * A-1299-428-A | A BOARD, COMPLETE | | 116 | Δ 1-790-130-11 | CORD, AC POWER(WITH CONNECTOR) | |
| 105 | 8-598-542-20 | TUNER, FSS BTF-WA412 (TU2) | | 117 | * A-1316-566-A | G BOARD, COMPLETE | |
| 106 | 8-598-430-50 | TUNER, FSS BTF-FA401 (TU1) | | 118 | 4-378-522-31 | SCREW (4X20), TAPPING | |
| 107 | * 1-557-056-31 | CABLE, P-P | | 119 | 1-500-021-11 | CLAMP, SLEEVE FERRITE | |
| 108 | * 1-556-945-21 | CABLE, P-P | | 120 | 1-543-653-11 | CORE ASSY, BEAD(DIVISION TYPE) | |
| 109 | 1-771-787-11 | SWITCH, RF ANTENNA | | 121 | 4-069-675-01 | CAP, TERMINAL BOARD | |
| 110 | 4-081-961-01 | BOARD, TERMINAL | | 122 | 4-081-576-01 | LABEL, TERMINAL | |
| 111 | * A-1373-851-A | U BOARD, COMPLETE | | 124 | * X-4039-086-1 | CABINET (43) ASSY, BOTTOM | 126 |
| 112 | * A-1136-218-A | B BOARD, COMPLETE | | 125 | 3-710-578-01 | COVER VOLUME 6 HULD | |
| 113 | * A-1299-523-A | AD BOARD, COMPLETE | | 126 | 4-057-611-01 | FOOT | |
| | | | | 127 | 4-081-063-01 | SCREW,DOME WASHER HEX TAP 4X20 | |

7-4. CHASSIS

(KP-53HS20/HS30/61HS20/HS30)

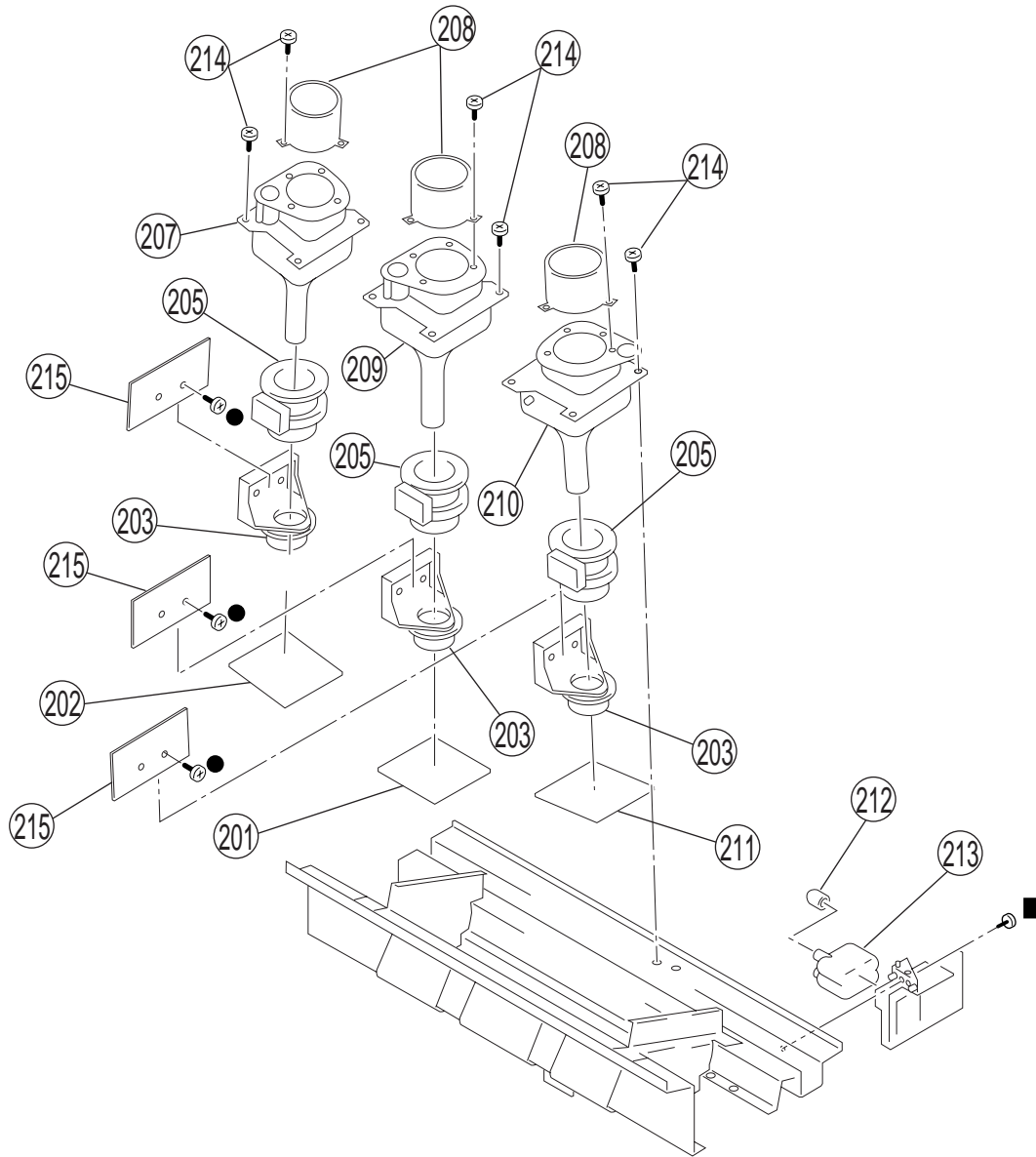
- : +BVTP 3X12 7-685-648-79
■ : +BVTP 4X12 7-685-661-14



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|----------------|---------------------------------|--------|----------|----------------|--------------------------------|--------------------------|
| 151 | 1-544-849-11 | SPEAKER (13CM) | | 166 | △ 1-790-130-11 | CORD, AC POWER(WITH CONNECTOR) | |
| 152 | 1-529-403-11 | SPEAKER (6.6CM) | | 167 | * A-1316-566-A | G BOARD, COMPLETE | |
| 153 | △ 1-223-925-11 | RESISTOR ASSY (FOCUS PACK) | | 168 | 4-378-522-31 | SCREW (4X20), TAPPING | |
| 154 | * A-1299-428-A | A BOARD, COMPLETE | | 169 | 1-500-021-11 | CLAMP, SLEEVE FERRITE | |
| 155 | 8-598-542-20 | TUNER, FSS BTF-WA412 (TU2) | | 170 | 1-543-653-11 | CORE ASSY, BEAD(DIVISION TYPE) | |
| 156 | 8-598-430-50 | TUNER, FSS BTF-FA401 (TU1) | | 171 | 4-069-675-01 | CAP, TERMINAL BOARD | |
| 157 | * 1-557-056-31 | CABLE, P-P | | 172 | 4-081-576-01 | LABEL, TERMINAL | |
| 158 | * 1-556-945-21 | CABLE, P-P | | 173 | * 4-083-506-01 | COVER, CABINET (HS) | |
| 159 | 1-771-787-11 | SWITCH, RF ANTENNA | | 174 | * X-4039-049-1 | CABINET (53) ASSY, BOTTOM | (53HS20,53HS30) 176, 177 |
| 160 | 4-081-961-01 | BOARD, TERMINAL | | | * X-4039-084-1 | CABINET ASSY, BOTTOM | (61HS20,61HS30) 176, 177 |
| 161 | * A-1373-851-A | U BOARD, COMPLETE | | 175 | 3-710-578-01 | COVER VOLUME 6 HULD | |
| 162 | * A-1136-218-A | B BOARD, COMPLETE | | 176 | 4-040-755-01 | CASTER (DIA. 30) | |
| 163 | * A-1299-523-A | AD BOARD, COMPLETE | | 177 | 4-075-020-01 | FOOT, PLASTIC | |
| 164 | * A-1348-038-A | D BOARD, COMPLETE | | 178 | 4-081-063-01 | SCREW,DOME WASHER HEX TAP 4X20 | |
| 165 | △ 1-453-285-21 | FBT ASSY, NX-4006//X4P4 (T8005) | | | | | |

7-5. PICTURE TUBE

- : +BVTP 3X12 7-685-648-79
■ : +BVTP 4X12 7-685-661-14



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|----------------|--|--------|----------|----------------|--------------------------------|-----------------|
| 201 | * A-1332-159-A | CG BOARD, COMPLETE | | 209 | △ A-1501-976-A | COUPLER (G) ASSY, CRT | |
| 202 | * A-1332-158-A | CR BOARD, COMPLETE | | 210 | △ A-1501-977-A | COUPLER (B) ASSY, CRT | |
| 203 | △ 1-451-535-11 | COIL ASSY, VM | | | | | (53HS20,53HS30) |
| 205 | △ 1-451-537-11 | DEFLECTION YOKE | | | △ A-1501-979-A | COUPLER (B) ASSY CRT | |
| | | | | | | | (61HS20,61HS30) |
| 207 | △ A-1501-975-A | COUPLER (R) ASSY, CRT | | | △ A-1501-981-A | COUPLER (B) ASSY, CRT (43HT20) | |
| | | | | | | | |
| | △ A-1501-978-A | COUPLER (R) ASSY CRT | | 211 | * A-1332-160-A | CB BOARD, COMPLETE | |
| | | | | 212 | 4-373-137-01 | CAP (Z), RUBBER | |
| | △ A-1501-980-A | COUPLER (R) ASSY, CRT (43HT20) | | 213 | △ 8-598-955-31 | BLOCK ASSY, HV HVB-1031 | |
| 208 | 4-040-131-21 | LENS (LINNIT POINT 6) (61HS20,61HS30) | | 214 | 4-052-894-01 | SCREW (4X20), HEAD TAPPING | |
| | 4-056-258-11 | LENS (DELTA 78) (43HT20,53HS20,53HS30) | | 215 | * A-1342-598-A | V BOARD, COMPLETE | |



SECTION 8

ELECTRICAL PARTS LIST

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- The components identified by in \square this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- CAPACITORS
PF : $\mu\mu$ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

RESISTORS
 • All resistors are in ohms
 • F : nonflammable

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--|--------------|----------------------------|--------|----------------|--------------|----------------------------|--------|
| * A-1332-158-A CR BOARD, COMPLETE ***** | | | | < COIL > | | | |
| | 4-382-854-11 | SCREW (M3X10), P, SW (+) | | L7101 | 1-414-223-11 | INDUCTOR 470UH | |
| | | < CAPACITOR > | | L7102 | 1-414-187-11 | INDUCTOR 47UH | |
| C7101 | 1-104-570-11 | CERAMIC 0.001UF 10% 2KV | | L7103 | 1-414-181-11 | INDUCTOR 4.7UH | |
| C7102 | 1-107-662-11 | ELECT 22UF 20% 250V | | < NEON LAMP > | | | |
| C7103 | 1-126-964-11 | ELECT 10UF 20% 50V | | NL7101 | 1-517-778-21 | LAMP, NEON | |
| C7104 | 1-161-830-00 | CERAMIC 0.0047UF 500V | | < TRANSISTOR > | | | |
| C7105 | 1-102-050-00 | CERAMIC 0.01UF 99% 500V | | Q7101 | 8-729-026-49 | 2SA1037AK-T146-R | |
| C7106 | 1-126-768-11 | ELECT 2200UF 20% 16V | | Q7102 | 8-729-422-27 | 2SD601A-Q | |
| C7107 | 1-162-115-00 | CERAMIC 330PF 10% 2KV | | < RESISTOR > | | | |
| C7108 | 1-107-826-11 | CERAMIC CHIP 0.1UF 10% 16V | | R7102 | 1-216-813-11 | RES-CHIP 220 5% 1/16W | |
| C7109 | 1-107-826-11 | CERAMIC CHIP 0.1UF 10% 16V | | R7103 | 1-216-864-11 | SHORT 0 | |
| C7110 | 1-126-967-11 | ELECT 47UF 20% 50V | | R7104 | 1-260-132-11 | CARBON 560K 5% 1/2W | |
| C7112 | 1-162-927-11 | CERAMIC CHIP 100PF 5% 50V | | R7105 | 1-219-743-11 | CARBON 100 5% 1/2W | |
| C7113 | 1-102-157-00 | CERAMIC 560PF 10% 500V | | R7106 | 1-218-714-11 | METAL CHIP 8.2K 0.5% 1/16W | |
| C7114 | 1-162-912-11 | CERAMIC CHIP 7PF 0.50PF50V | | R7107 | 1-218-716-11 | METAL CHIP 10K 0.5% 1/16W | |
| C7115 | 1-162-907-11 | CERAMIC CHIP 2PF 0.25PF50V | | R7108 | 1-216-823-11 | RES-CHIP 1.5K 5% 1/16W | |
| C7116 | 1-107-504-11 | CERAMIC 10PF 500V | | R7109 | 1-260-133-11 | CARBON 680K 5% 1/2W | |
| | | < CONNECTOR > | | R7110 | 1-218-710-11 | METAL CHIP 5.6K 0.5% 1/16W | |
| CN7102* | 1-564-509-11 | PLUG, CONNECTOR 6P | | R7111 | 1-218-718-11 | METAL CHIP 12K 0.5% 1/16W | |
| CN7103* | 1-564-510-11 | PLUG, CONNECTOR 7P | | R7112 | 1-218-706-11 | METAL CHIP 3.9K 0.5% 1/16W | |
| CN7104 | 1-785-879-11 | CONNECTOR, ONE TOUCH | | R7113 | 1-216-813-11 | RES-CHIP 220 5% 1/16W | |
| CN7105 | 1-695-915-11 | TAB (CONTACT) | | R7114 | 1-249-424-11 | CARBON 3.9K 5% 1/4W | |
| CN7108 Δ | 1-251-182-11 | SOCKET, CRT | | R7115 | 1-260-328-11 | CARBON 1K 5% 1/2W | |
| | | < DIODE > | | R7116 | 1-216-811-11 | RES-CHIP 150 5% 1/16W | |
| D7103 | 8-719-921-88 | MTZJ-13B | | R7117 | 1-260-087-11 | CARBON 100 5% 1/2W | |
| D7104 | 8-719-901-83 | 1SS83 | | R7118 | 1-218-696-11 | METAL CHIP 1.5K 0.5% 1/16W | |
| D7105 | 8-719-901-83 | 1SS83 | | R7119 | 1-218-701-11 | METAL CHIP 2.4K 0.5% 1/16W | |
| D7106 | 8-719-901-83 | 1SS83 | | R7120 | 1-215-929-11 | METAL OXIDE 100K 5% 3W | |
| D7107 | 8-719-901-83 | 1SS83 | | R7121 | 1-216-864-11 | SHORT 0 | |
| D7108 | 8-719-921-88 | MTZJ-13B | | R7122 | 1-260-093-11 | CARBON 330 5% 1/2W | |
| D7109 | 8-719-921-88 | MTZJ-13B | | R7123 | 1-216-864-11 | SHORT 0 | |
| D7110 | 8-719-991-33 | 1SS133T-77 | | < SPARK GAP > | | | |
| | | < IC > | | SG7101 | 1-519-422-11 | GAP, SPARK | |
| IC7101 | 8-759-360-83 | TDA6111Q/N4 | | SG7102 | 1-517-729-31 | GAP, SPARK | |

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

CG

CB

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|-----------------------------------|--------------------------|----------------------------|--------|
| * A-1332-159-A CG BOARD, COMPLETE | | | |
| ***** | | | |
| 4-382-854-11 | SCREW (M3X10), P, SW (+) | | |
| < CAPACITOR > | | | |
| C7201 | 1-107-662-11 | ELECT 22UF 20% 250V | |
| C7202 | 1-104-570-11 | CERAMIC 0.001UF 10% 2KV | |
| C7203 | 1-126-964-11 | ELECT 10UF 20% 50V | |
| C7204 | 1-161-830-00 | CERAMIC 0.0047UF 500V | |
| C7205 | 1-126-768-11 | ELECT 2200UF 20% 16V | |
| C7206 | 1-102-050-00 | CERAMIC 0.01UF 99% 500V | |
| C7207 | 1-107-826-11 | CERAMIC CHIP 0.1UF 10% 16V | |
| C7208 | 1-162-115-00 | CERAMIC 330PF 10% 2KV | |
| C7209 | 1-107-826-11 | CERAMIC CHIP 0.1UF 10% 16V | |
| C7210 | 1-126-967-11 | ELECT 47UF 20% 50V | |
| C7212 | 1-162-927-11 | CERAMIC CHIP 100PF 5% 50V | |
| C7213 | 1-102-157-00 | CERAMIC 560PF 10% 500V | |
| C7214 | 1-162-913-11 | CERAMIC CHIP 8PF 0.50PF50V | |
| C7215 | 1-162-908-11 | CERAMIC CHIP 3PF 0.25PF50V | |
| < CONNECTOR > | | | |
| CN7202* | 1-564-509-11 | PLUG, CONNECTOR 6P | |
| CN7203* | 1-564-510-11 | PLUG, CONNECTOR 7P | |
| CN7204* | 1-564-510-11 | PLUG, CONNECTOR 7P | |
| CN7205 | 1-785-879-11 | CONNECTOR, ONE TOUCH | |
| CN7206 | 1-695-915-11 | TAB (CONTACT) | |
| CN7208 | 1-695-915-11 | TAB (CONTACT) | |
| CN7209 Δ | 1-251-182-11 | SOCKET, CRT | |
| < DIODE > | | | |
| D7203 | 8-719-921-88 | MTZJ-13B | |
| D7204 | 8-719-901-83 | 1SS83 | |
| D7205 | 8-719-991-33 | 1SS133T-77 | |
| D7206 | 8-719-901-83 | 1SS83 | |
| D7207 | 8-719-901-83 | 1SS83 | |
| D7208 | 8-719-901-83 | 1SS83 | |
| D7209 | 8-719-921-88 | MTZJ-13B | |
| D7210 | 8-719-921-88 | MTZJ-13B | |
| < IC > | | | |
| IC7201 | 8-759-360-83 | TDA6111Q/N4 | |
| < JUMPER RESISTOR > | | | |
| JR7201 | 1-216-864-11 | SHORT 0 | |
| < COIL > | | | |
| L7201 | 1-414-223-11 | INDUCTOR 470UH | |
| L7202 | 1-414-187-11 | INDUCTOR 47UH | |
| L7203 | 1-414-181-11 | INDUCTOR 4.7UH | |
| < NEON LAMP > | | | |
| NL7201 | 1-517-778-21 | LAMP, NEON | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|-----------------------------------|--------------------------|----------------------------|--------|
| < TRANSISTOR > | | | |
| Q7201 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q7202 | 8-729-422-27 | 2SD601A-Q | |
| < RESISTOR > | | | |
| R7202 | 1-216-864-11 | SHORT 0 | |
| R7203 | 1-260-132-11 | CARBON 560K 5% 1/2W | |
| R7204 | 1-216-813-11 | RES-CHIP 220 5% 1/16W | |
| R7205 | 1-218-713-11 | METAL CHIP 7.5K 0.5% 1/16W | |
| R7206 | 1-218-716-11 | METAL CHIP 10K 0.5% 1/16W | |
| R7207 | 1-219-743-11 | CARBON 100 5% 1/2W | |
| R7208 | 1-216-823-11 | RES-CHIP 1.5K 5% 1/16W | |
| R7209 | 1-260-133-11 | CARBON 680K 5% 1/2W | |
| R7210 | 1-216-813-11 | RES-CHIP 220 5% 1/16W | |
| R7211 | 1-218-710-11 | METAL CHIP 5.6K 0.5% 1/16W | |
| R7212 | 1-218-718-11 | METAL CHIP 12K 0.5% 1/16W | |
| R7213 | 1-218-707-11 | METAL CHIP 4.3K 0.5% 1/16W | |
| R7215 | 1-249-424-11 | CARBON 3.9K 5% 1/4W | |
| R7216 | 1-216-811-11 | RES-CHIP 150 5% 1/16W | |
| R7217 | 1-218-696-11 | METAL CHIP 1.5K 0.5% 1/16W | |
| R7218 | 1-260-328-11 | CARBON 1K 5% 1/2W | |
| R7219 | 1-218-699-11 | METAL CHIP 2K 0.5% 1/16W | |
| R7220 | 1-215-929-11 | METAL OXIDE 100K 5% 3W | |
| R7221 | 1-216-864-11 | SHORT 0 | |
| R7222 | 1-260-087-11 | CARBON 100 5% 1/2W | |
| R7223 | 1-260-093-11 | CARBON 330 5% 1/2W | |
| R7224 | 1-216-864-11 | SHORT 0 | |
| < SPARK GAP > | | | |
| SG7201 | 1-519-422-11 | GAP, SPARK | |
| SG7202 | 1-517-729-31 | GAP, SPARK | |
| ***** | | | |
| * A-1332-160-A CB BOARD, COMPLETE | | | |
| ***** | | | |
| 4-382-854-11 | SCREW (M3X10), P, SW (+) | | |
| < CAPACITOR > | | | |
| C7301 | 1-107-662-11 | ELECT 22UF 20% 250V | |
| C7302 | 1-104-570-11 | CERAMIC 0.001UF 10% 2KV | |
| C7303 | 1-126-768-11 | ELECT 2200UF 20% 16V | |
| C7304 | 1-161-830-00 | CERAMIC 0.0047UF 500V | |
| C7305 | 1-107-826-11 | CERAMIC CHIP 0.1UF 10% 16V | |
| C7306 | 1-102-050-00 | CERAMIC 0.01UF 99% 500V | |
| C7307 | 1-126-964-11 | ELECT 10UF 20% 50V | |
| C7308 | 1-107-826-11 | CERAMIC CHIP 0.1UF 10% 16V | |
| C7309 | 1-162-115-00 | CERAMIC 330PF 10% 2KV | |
| C7310 | 1-126-967-11 | ELECT 47UF 20% 50V | |
| C7312 | 1-162-927-11 | CERAMIC CHIP 100PF 5% 50V | |
| C7313 | 1-102-157-00 | CERAMIC 560PF 10% 500V | |
| C7314 | 1-162-913-11 | CERAMIC CHIP 8PF 0.50PF50V | |
| C7315 | 1-162-907-11 | CERAMIC CHIP 2PF 0.25PF50V | |

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

CB

V

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|-------------------|--------------|----------------------------|--------|---------------------------------------|--------------|------------------------------|--------|
| < CONNECTOR > | | | | R7324 | 1-260-093-11 | CARBON 330 5% 1/2W | |
| CN7302* | 1-564-509-11 | PLUG, CONNECTOR 6P | | R7325 | 1-216-864-11 | SHORT 0 | |
| CN7303* | 1-564-510-11 | PLUG, CONNECTOR 7P | | R7327 | 1-216-864-11 | SHORT 0 | |
| CN7304* | 1-564-510-11 | PLUG, CONNECTOR 7P | | R7328 | 1-216-823-11 | RES-CHIP 1.5K 5% 1/16W | |
| CN7305 | 1-785-879-11 | CONNECTOR, ONE TOUCH | | < SPARK GAP > | | | |
| CN7307 | 1-695-915-11 | TAB (CONTACT) | | SG7301 | 1-519-422-11 | GAP, SPARK | |
| CN7308 | 1-695-915-11 | TAB (CONTACT) | | SG7302 | 1-517-729-31 | GAP, SPARK | |
| CN7309 Δ 1 | 251-182-11 | SOCKET, CRT | | ***** | | | |
| < DIODE > | | | | * A-1342-598-A V BOARD, COMPLETE | | | |
| D7303 | 8-719-921-88 | MTZJ-13B | | ***** | | | |
| D7304 | 8-719-901-83 | ISS83 | | 4-382-854-11 SCREW (M3X10), P, SW (+) | | | |
| D7305 | 8-719-991-33 | ISS133T-77 | | < CAPACITOR > | | | |
| D7306 | 8-719-901-83 | ISS83 | | C9002 | 1-104-999-11 | MYLAR 0.1UF 10% 200V | |
| D7307 | 8-719-901-83 | ISS83 | | C9003 | 1-125-891-11 | CERAMIC CHIP 0.47UF 10% 10V | |
| D7308 | 8-719-901-83 | ISS83 | | C9006 | 1-126-935-11 | ELECT 470UF 20% 6.3V | |
| D7309 | 8-719-991-33 | ISS133T-77 | | C9007 | 1-126-933-11 | ELECT 100UF 20% 16V | |
| D7310 | 8-719-921-88 | MTZJ-13B | | C9008 | 1-126-935-11 | ELECT 470UF 20% 6.3V | |
| D7311 | 8-719-921-88 | MTZJ-13B | | C9009 | 1-126-933-11 | ELECT 100UF 20% 16V | |
| < IC > | | | | C9010 | 1-107-667-11 | ELECT 2.2UF 20% 160V | |
| IC7301 | 8-759-360-83 | TDA6111Q/N4 | | C9011 | 1-107-364-11 | MYLAR 0.01UF 10% 200V | |
| < COIL > | | | | C9012 | 1-107-364-11 | MYLAR 0.01UF 10% 200V | |
| L7301 | 1-414-223-11 | INDUCTOR 470UH | | C9013 | 1-162-964-11 | CERAMIC CHIP 0.001UF 10% 50V | |
| L7302 | 1-414-187-11 | INDUCTOR 47UH | | C9014 | 1-162-964-11 | CERAMIC CHIP 0.001UF 10% 50V | |
| L7303 | 1-414-181-11 | INDUCTOR 4.7UH | | C9015 | 1-126-935-11 | ELECT 470UF 20% 16V | |
| < NEON LAMP > | | | | C9017 | 1-104-999-11 | MYLAR 0.1UF 10% 200V | |
| NL7301 | 1-517-778-21 | LAMP, NEON | | C9018 | 1-107-638-11 | ELECT 33UF 20% 160V | |
| < TRANSISTOR > | | | | C9019 | 1-126-935-11 | ELECT 470UF 20% 16V | |
| Q7301 | 8-729-026-49 | 2SA1037AK-T146-R | | < CONNECTOR > | | | |
| Q7302 | 8-729-026-49 | 2SA1037AK-T146-R | | CN9001* | 1-564-508-11 | PLUG, CONNECTOR 5P | |
| < RESISTOR > | | | | CN9002* | 1-770-723-11 | CONNECTOR, BOARD TO BOARD 8P | |
| R7301 | 1-249-393-11 | CARBON 10 5% 1/4W | | < DIODE > | | | |
| R7303 | 1-260-132-11 | CARBON 560K 5% 1/2W | | D9001 | 8-719-404-50 | MA111-TX | |
| R7304 | 1-216-864-11 | SHORT 0 | | D9002 | 8-719-404-50 | MA111-TX | |
| R7305 | 1-216-813-11 | RES-CHIP 220 5% 1/16W | | D9003 | 8-719-404-50 | MA111-TX | |
| R7306 | 1-219-743-11 | CARBON 100 5% 1/2W | | D9003 | 8-719-988-61 | 1SS355TE-17 | |
| R7308 | 1-218-713-11 | METAL CHIP 7.5K 0.5% 1/16W | | D9004 | 8-719-404-50 | MA111-TX | |
| R7309 | 1-218-718-11 | METAL CHIP 12K 0.5% 1/16W | | D9005 | 8-719-510-02 | D1NS4 | |
| R7310 | 1-216-813-11 | RES-CHIP 220 5% 1/16W | | D9006 | 8-719-924-13 | MTZJ-T-77-22B | |
| R7311 | 1-218-710-11 | METAL CHIP 5.6K 0.5% 1/16W | | D9007 | 8-719-924-13 | MTZJ-T-77-22B | |
| R7312 | 1-218-718-11 | METAL CHIP 12K 0.5% 1/16W | | < COIL > | | | |
| R7313 | 1-260-133-11 | CARBON 680K 5% 1/2W | | L9001 | 1-412-525-31 | INDUCTOR 10UH | |
| R7314 | 1-218-702-11 | METAL CHIP 2.7K 0.5% 1/16W | | < TRANSISTOR > | | | |
| R7316 | 1-249-424-11 | CARBON 3.9K 5% 1/4W | | Q9002 | 8-729-422-27 | 2SD601A-Q | |
| R7317 | 1-216-811-11 | RES-CHIP 150 5% 1/16W | | Q9003 | 8-729-422-27 | 2SD601A-Q | |
| R7318 | 1-218-696-11 | METAL CHIP 1.5K 0.5% 1/16W | | Q9004 | 8-729-026-49 | 2SA1037AK-T146-R | |
| R7319 | 1-260-328-11 | CARBON 1K 5% 1/2W | | Q9005 | 8-729-422-27 | 2SD601A-Q | |
| R7320 | 1-218-701-11 | METAL CHIP 2.4K 0.5% 1/16W | | Q9006 | 8-729-026-49 | 2SA1037AK-T146-R | |
| R7321 | 1-215-929-11 | METAL OXIDE 100K 5% 3W | | Q9007 | 8-729-422-27 | 2SD601A-Q | |
| R7322 | 1-260-087-11 | CARBON 100 5% 1/2W | | | | | |
| R7323 | 1-218-708-11 | METAL CHIP 4.7K 0.5% 1/16W | | | | | |



| REF. NO. | PART NO. | DESCRIPTION | REMARK | | | REF. NO. | PART NO. | DESCRIPTION | REMARK | | |
|----------------------------------|--------------|--------------|--------|-----|-------|----------|--------------|--------------|--------|-----|------|
| Q9008 | 8-729-045-04 | 2SC5511 | | | | C3306 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| Q9009 | 8-729-045-05 | 2SA2005 | | | | C3307 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| < RESISTOR > | | | | | | C3308 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9002 | 1-216-805-11 | RES-CHIP | 47 | 5% | 1/16W | C3309 | 1-126-206-11 | ELECT CHIP | 100UF | 20% | 6.3V |
| R9004 | 1-216-820-11 | RES-CHIP | 820 | 5% | 1/16W | C3310 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9005 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W | C3311 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9006 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W | C3312 | 1-126-206-11 | ELECT CHIP | 100UF | 20% | 6.3V |
| R9007 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | C3313 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9008 | 1-216-803-11 | RES-CHIP | 33 | 5% | 1/16W | C3314 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9009 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | C3315 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9010 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W | C3316 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9011 | 1-216-864-11 | SHORT | 0 | | | C3317 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9012 | 1-216-823-11 | RES-CHIP | 1.5K | 5% | 1/16W | C3318 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9013 | 1-216-805-11 | RES-CHIP | 47 | 5% | 1/16W | C3319 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9014 | 1-216-805-11 | RES-CHIP | 47 | 5% | 1/16W | C3320 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9015 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/16W | C3321 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9016 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | C3322 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| R9017 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | C3323 | 1-124-779-00 | ELECT CHIP | 10UF | 20% | 16V |
| R9018 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W | C3324 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9019 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W | C3325 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9020 | 1-216-799-11 | RES-CHIP | 15 | 5% | 1/16W | C3326 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9021 | 1-216-799-11 | RES-CHIP | 15 | 5% | 1/16W | C3327 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9022 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | C3328 | 1-124-779-00 | ELECT CHIP | 10UF | 20% | 16V |
| R9023 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W | C3329 | 1-107-826-11 | CERAMIC CHIP | 0.1UF | 10% | 16V |
| R9024 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | C3331 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| R9025 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | C3332 | 1-124-779-00 | ELECT CHIP | 10UF | 20% | 16V |
| R9027 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | C3333 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9028 | 1-249-405-11 | CARBON | 100 | 5% | 1/4W | C3334 | 1-107-826-11 | CERAMIC CHIP | 0.1UF | 10% | 16V |
| R9029 | 1-215-913-11 | METAL OXIDE | 220 | 5% | 3W | C3335 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9030 | 1-249-377-11 | CARBON | 0.47 | 5% | 1/4W | C3336 | 1-124-779-00 | ELECT CHIP | 10UF | 20% | 16V |
| R9031 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | C3337 | 1-107-826-11 | CERAMIC CHIP | 0.1UF | 10% | 16V |
| R9032 | 1-249-385-11 | CARBON | 2.2 | 5% | 1/4W | C3338 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9033 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | C3339 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| R9034 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W | C3340 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| ***** | | | | | | C3341 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| * A-1136-218-A B BOARD, COMPLETE | | | | | | C3343 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| ***** | | | | | | C3344 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| < CAPACITOR > | | | | | | C3345 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| C3001 | 1-128-453-21 | ELECT CHIP | 47UF | 20% | 6.3V | C3346 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3002 | 1-128-453-21 | ELECT CHIP | 47UF | 20% | 6.3V | C3347 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3003 | 1-128-453-21 | ELECT CHIP | 47UF | 20% | 6.3V | C3348 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3035 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10% | 25V | C3349 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3044 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V | C3350 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3089 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10% | 25V | C3351 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3090 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V | C3352 | 1-124-779-00 | ELECT CHIP | 10UF | 20% | 16V |
| C3096 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10% | 25V | C3353 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| C3101 | 1-162-925-11 | CERAMIC CHIP | 68PF | 5% | 50V | C3354 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3102 | 1-162-925-11 | CERAMIC CHIP | 68PF | 5% | 50V | C3355 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3301 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V | C3356 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| C3302 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V | C3357 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3303 | 1-126-206-11 | ELECT CHIP | 100UF | 20% | 6.3V | C3358 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| C3304 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V | C3359 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| C3305 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V | C3360 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |
| | | | | | | C3361 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10% | 25V |
| | | | | | | C3362 | 1-127-760-11 | CERAMIC CHIP | 4.7UF | 10% | 6.3V |
| | | | | | | C3363 | 1-126-204-11 | ELECT CHIP | 47UF | 20% | 16V |
| | | | | | | C3364 | 1-164-156-11 | CERAMIC CHIP | 0.1UF | | 25V |

B

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|---------------------|-----------|---------------|--------------|---------------------------|----------|
| C3365 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3445 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V |
| C3366 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3446 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C3367 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3447 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3368 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3448 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| C3369 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3449 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3370 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3450 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3371 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3451 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3372 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3452 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3373 | 1-162-915-11 | CERAMIC CHIP 10PF | 0.50PF50V | C3453 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3374 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3454 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3375 | 1-127-760-11 | CERAMIC CHIP 4.7UF | 10% 6.3V | C3455 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3376 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3456 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3377 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V | C3457 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3378 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V | C3458 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3379 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3460 | 1-162-923-11 | CERAMIC CHIP 47PF | 5% 50V |
| C3401 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3462 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3402 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V | C3463 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3403 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3464 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3404 | 1-126-206-11 | ELECT CHIP 100UF | 20% 6.3V | C3465 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3405 | 1-126-206-11 | ELECT CHIP 100UF | 20% 6.3V | C3466 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3406 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V | C3467 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3407 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V | C3468 | 1-126-206-11 | ELECT CHIP 100UF | 20% 6.3V |
| C3408 | 1-126-206-11 | ELECT CHIP 100UF | 20% 6.3V | C3469 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3409 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3470 | 1-126-206-11 | ELECT CHIP 100UF | 20% 6.3V |
| C3410 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3473 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3411 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3474 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3412 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3475 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3413 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3476 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3414 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3477 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3415 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V | C3478 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V |
| C3416 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3479 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3417 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3480 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3418 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V | C3481 | 1-117-681-11 | ELECT CHIP 100UF | 20% 16V |
| C3419 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3482 | 1-117-681-11 | ELECT CHIP 100UF | 20% 16V |
| C3420 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V | C3483 | 1-117-681-11 | ELECT CHIP 100UF | 20% 16V |
| C3421 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3484 | 1-125-837-91 | CERAMIC CHIP 1UF | 10% 6.3V |
| C3422 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3485 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3423 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V | C3486 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3424 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3487 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3425 | 1-125-891-11 | CERAMIC CHIP 0.47UF | 10% 10V | C3488 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3426 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3489 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3428 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V | C3490 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3429 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V | C3491 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V |
| C3430 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3492 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3431 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V | C3493 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V |
| C3432 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3494 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3433 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V | C3495 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V |
| C3434 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V | C3496 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V |
| C3435 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | C3499 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| C3436 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V | < CONNECTOR > | | | |
| C3437 | 1-126-204-11 | ELECT CHIP 47UF | 20% 16V | CN3203* | 1-793-923-11 | CONNECTOR, DIN (PLUG) 64P | |
| C3438 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | < DIODE > | | | |
| C3439 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | D3089 | 8-719-800-76 | 1SS226 | |
| C3440 | 1-162-916-11 | CERAMIC CHIP 12PF | 5% 50V | D3090 | 8-719-800-76 | 1SS226 | |
| C3441 | 1-162-916-11 | CERAMIC CHIP 12PF | 5% 50V | D3301 | 8-719-083-58 | UDZSTE-173.9B | |
| C3442 | 1-124-779-00 | ELECT CHIP 10UF | 20% 16V | | | | |
| C3443 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V | | | | |
| C3444 | 1-164-156-11 | CERAMIC CHIP 0.1UF | 25V | | | | |

B

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|------------------|--------------|-------------------------|--------|----------------|--------------|------------------|--------------|
| D3302 | 8-719-069-60 | UDZSTE-179.1B | | L3311 | 1-469-561-21 | INDUCTOR | 100UH |
| D3401 | 8-719-914-43 | DAN202K | | L3312 | 1-469-555-21 | INDUCTOR | 10UH |
| D3402 | 8-719-914-45 | DAP202K | | L3401 | 1-412-058-11 | INDUCTOR | 10UH |
| D3403 | 8-719-069-33 | DTZ-TT11-6.8B | | L3402 | 1-412-052-21 | INDUCTOR | 1UH |
| < FERRITE BEAD > | | | | L3403 | 1-469-561-21 | INDUCTOR | 100UH |
| FB3302 | 1-500-451-11 | FERRITE | 0UH | L3404 | 1-469-561-21 | INDUCTOR | 100UH |
| FB3401 | 1-414-235-22 | FERRITE | 0UH | L3405 | 1-469-555-21 | INDUCTOR | 10UH |
| FB3402 | 1-414-235-22 | FERRITE | 0UH | L3406 | 1-469-555-21 | INDUCTOR | 10UH |
| < FILTER > | | | | L3407 | 1-469-555-21 | INDUCTOR | 10UH |
| FL3003 | 1-781-924-11 | FILTER, LOW PASS (SMD) | | L3408 | 1-469-555-21 | INDUCTOR | 10UH |
| FL3301 | 1-234-558-21 | FILTER, LOW PASS | | L3409 | 1-469-555-21 | INDUCTOR | 10UH |
| FL3302 | 1-234-557-21 | FILTER, LOW PASS | | L3410 | 1-412-058-11 | INDUCTOR | 10UH |
| FL3303 | 1-234-557-21 | FILTER, LOW PASS | | L3411 | 1-412-058-11 | INDUCTOR | 10UH |
| FL3401 | 1-781-923-11 | FILTER, LOW PASS (SMD) | | L3412 | 1-469-555-21 | INDUCTOR | 10UH |
| < IC > | | | | L3413 | 1-469-555-21 | INDUCTOR | 10UH |
| IC3089 | 6-700-149-01 | IC M24C04-MN6T(A) | | L3414 | 1-469-555-21 | INDUCTOR | 10UH |
| IC3090 | 8-759-832-08 | IC MB94918RPF-G-134-BND | | L3416 | 1-469-555-21 | INDUCTOR | 10UH |
| IC3091 | 8-759-349-11 | PST9145NL | | < TRANSISTOR > | | | |
| IC3301 | 8-759-832-53 | W981616AH-7-EL1 | | Q3005 | 8-729-422-27 | 2SD601A-Q | |
| IC3302 | 8-759-832-05 | IC BA18BC0FP-E2 | | Q3006 | 8-729-422-27 | 2SD601A-Q | |
| IC3303 | 8-752-409-78 | IC CXD2095AQ | | Q3007 | 8-729-422-27 | 2SD601A-Q | |
| IC3304 | 8-759-447-90 | TLC5733AIPM | | Q3089 | 8-729-026-49 | 2SA1037AK-T146-R | |
| IC3305 | 8-759-669-75 | TLC2932IPWR | | Q3090 | 8-729-026-49 | 2SA1037AK-T146-R | |
| IC3306 | 8-759-669-78 | TLC2933IPWR-12 | | Q3091 | 1-801-806-11 | TR DTC144EKA | |
| IC3401 | 6-700-394-01 | IC BA25BC0FP-E2 | | Q3401 | 8-729-422-27 | 2SD601A-Q | |
| IC3402 | 8-759-677-39 | MB81F643242B-D | | Q3301 | 8-729-422-27 | 2SD601A-Q | |
| IC3403 | 8-759-460-29 | PST9120NL | | Q3302 | 8-729-422-27 | 2SD601A-Q | |
| IC3404 | 8-759-669-75 | TLC2932IPWR | | Q3303 | 8-729-422-27 | 2SD601A-Q | |
| IC3405 | 8-759-453-97 | TC7SET08FU(TE85L) | | Q3304 | 8-729-422-27 | 2SD601A-Q | |
| IC3406 | 8-759-453-97 | TC7SET08FU(TE85L) | | Q3305 | 8-729-026-49 | 2SA1037AK-T146-R | |
| IC3407 | 8-759-453-97 | TC7SET08FU(TE85L) | | Q3306 | 8-729-026-49 | 2SA1037AK-T146-R | |
| IC3408 | 8-759-672-57 | CXD9509AQ | | Q3307 | 8-729-422-27 | 2SD601A-Q | |
| IC3409 | 8-759-833-72 | IC NJM2870F25-TE2 | | Q3308 | 8-729-026-49 | 2SA1037AK-T146-R | |
| IC3410 | 8-752-367-59 | CXD2309Q | | Q3309 | 8-729-422-27 | 2SD601A-Q | |
| IC3411 | 8-759-082-57 | TC7W04FU | | Q3310 | 8-729-026-49 | 2SA1037AK-T146-R | |
| IC3412 | 8-759-082-58 | TC7W08FU | | Q3311 | 8-729-422-27 | 2SD601A-Q | |
| IC3413 | 8-759-595-97 | SN74LV4053ANSR | | Q3402 | 8-729-028-28 | 2SK2036(TE85L) | |
| IC3414 | 8-759-548-56 | M52055FP | | Q3403 | 8-729-422-27 | 2SD601A-Q | |
| < COIL > | | | | Q3404 | 8-729-028-28 | 2SK2036(TE85L) | |
| L3001 | 1-216-295-91 | SHORT | 0 | Q3405 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3089 | 1-414-233-22 | FERRITE | 0UH | Q3406 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3102 | 1-412-946-11 | INDUCTOR | 3.9UH | Q3407 | 8-729-422-27 | 2SD601A-Q | |
| L3301 | 1-412-058-11 | INDUCTOR | 10UH | Q3408 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3302 | 1-469-555-21 | INDUCTOR | 10UH | Q3409 | 8-729-422-27 | 2SD601A-Q | |
| L3303 | 1-412-052-21 | INDUCTOR | 1UH | Q3410 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3304 | 1-469-555-21 | INDUCTOR | 10UH | Q3411 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3305 | 1-469-555-21 | INDUCTOR | 10UH | Q3412 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3306 | 1-469-561-21 | INDUCTOR | 100UH | Q3413 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3307 | 1-469-555-21 | INDUCTOR | 10UH | Q3414 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3308 | 1-469-561-21 | INDUCTOR | 100UH | Q3415 | 8-729-026-49 | 2SA1037AK-T146-R | |
| L3309 | 1-469-561-21 | INDUCTOR | 100UH | < RESISTOR > | | | |
| L3310 | 1-469-561-21 | INDUCTOR | 100UH | R3001 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| | | | | R3002 | 1-216-864-11 | SHORT | 0 |
| | | | | R3021 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R3022 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |

B

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|----------|--------------|-------------|-----------------|
| R3023 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R3329 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| R3035 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3330 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| R3036 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3331 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R3037 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3332 | 1-218-709-11 | METAL CHIP | 5.1K 0.5% 1/16W |
| R3038 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W | R3333 | 1-216-864-11 | SHORT | 0 |
| R3039 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W | R3334 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R3040 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W | R3335 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R3050 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3337 | 1-216-820-11 | RES-CHIP | 820 5% 1/16W |
| R3079 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R3338 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R3089 | 1-216-864-11 | SHORT | 0 | R3339 | 1-216-855-11 | RES-CHIP | 680K 5% 1/16W |
| R3091 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R3340 | 1-216-855-11 | RES-CHIP | 680K 5% 1/16W |
| R3092 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R3341 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| R3095 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W | R3342 | 1-218-705-11 | METAL CHIP | 3.6K 0.5% 1/16W |
| R3096 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R3343 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R3097 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W | R3344 | 1-216-853-11 | RES-CHIP | 470K 5% 1/16W |
| R3098 | 1-216-805-11 | RES-CHIP | 47 5% 1/16W | R3345 | 1-218-704-11 | METAL CHIP | 3.3K 0.5% 1/16W |
| R3099 | 1-216-805-11 | RES-CHIP | 47 5% 1/16W | R3346 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R3100 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3347 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| R3101 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3348 | 1-216-864-11 | SHORT | 0 |
| R3102 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3349 | 1-218-687-11 | METAL CHIP | 620 0.5% 1/16W |
| R3103 | 1-216-822-11 | RES-CHIP | 1.2K 5% 1/16W | R3350 | 1-216-814-11 | RES-CHIP | 270 5% 1/16W |
| R3104 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3351 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R3105 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3352 | 1-216-853-11 | RES-CHIP | 470K 5% 1/16W |
| R3106 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W | R3353 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R3107 | 1-216-864-11 | SHORT | 0 | R3354 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| R3108 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R3355 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R3109 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W | R3356 | 1-216-819-11 | RES-CHIP | 680 5% 1/16W |
| R3110 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3357 | 1-218-676-11 | METAL CHIP | 220 0.5% 1/16W |
| R3111 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3358 | 1-218-676-11 | METAL CHIP | 220 0.5% 1/16W |
| R3301 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3359 | 1-218-676-11 | METAL CHIP | 220 0.5% 1/16W |
| R3302 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R3360 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W |
| R3303 | 1-218-710-11 | METAL CHIP | 5.6K 0.5% 1/16W | R3361 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R3304 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3364 | 1-216-864-11 | SHORT | 0 |
| R3305 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3365 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W |
| R3306 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R3366 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R3307 | 1-216-864-11 | SHORT | 0 | R3367 | 1-216-803-11 | RES-CHIP | 33 5% 1/16W |
| R3308 | 1-216-864-11 | SHORT | 0 | R3369 | 1-216-864-11 | SHORT | 0 |
| R3309 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3371 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W |
| R3310 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3372 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W |
| R3311 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3373 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W |
| R3312 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3374 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R3313 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R3375 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W |
| R3314 | 1-218-665-11 | METAL CHIP | 75 0.5% 1/16W | R3376 | 1-218-710-11 | METAL CHIP | 5.6K 0.5% 1/16W |
| R3315 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R3377 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W |
| R3316 | 1-218-664-11 | METAL CHIP | 68 0.5% 1/16W | R3378 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W |
| R3317 | 1-218-664-11 | METAL CHIP | 68 0.5% 1/16W | R3379 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R3318 | 1-218-665-11 | METAL CHIP | 75 0.5% 1/16W | R3380 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W |
| R3319 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3381 | 1-218-710-11 | METAL CHIP | 5.6K 0.5% 1/16W |
| R3320 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3382 | 1-216-864-11 | SHORT | 0 |
| R3321 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3383 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W |
| R3322 | 1-218-662-11 | METAL CHIP | 56 0.5% 1/16W | R3410 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R3323 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R3421 | 1-216-864-11 | SHORT | 0 |
| R3324 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R3422 | 1-216-864-11 | SHORT | 0 |
| R3325 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R3423 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| R3326 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R3428 | 1-216-803-11 | RES-CHIP | 33 5% 1/16W |
| R3327 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R3429 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W |
| R3328 | 1-216-864-11 | SHORT | 0 | R3432 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |

B

| REF. NO. | PART NO. | DESCRIPTION | | | REMARK | REF. NO. | PART NO. | DESCRIPTION | | | REMARK |
|----------|--------------|-------------|------|------|--------|----------|--------------|-------------|------|------|--------|
| R3434 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R3812 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R3445 | 1-216-864-11 | SHORT | 0 | | | R3813 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R3446 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3814 | 1-218-644-11 | METAL CHIP | 10 | 0.5% | 1/16W |
| R3447 | 1-216-819-11 | RES-CHIP | 680 | 5% | 1/16W | R3815 | 1-218-648-11 | METAL CHIP | 15 | 0.5% | 1/16W |
| R3448 | 1-216-855-11 | RES-CHIP | 680K | 5% | 1/16W | R3816 | 1-218-652-11 | METAL CHIP | 22 | 0.5% | 1/16W |
| R3452 | 1-216-864-11 | SHORT | 0 | | | R3817 | 1-218-652-11 | METAL CHIP | 22 | 0.5% | 1/16W |
| R3454 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W | R3820 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R3460 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/16W | R3821 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R3461 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/16W | R3822 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R3464 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3823 | 1-216-826-11 | RES-CHIP | 2.7K | 5% | 1/16W |
| R3465 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3824 | 1-216-826-11 | RES-CHIP | 2.7K | 5% | 1/16W |
| R3467 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3825 | 1-216-826-11 | RES-CHIP | 2.7K | 5% | 1/16W |
| R3470 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R3826 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R3471 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3828 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R3472 | 1-216-801-11 | RES-CHIP | 22 | 5% | 1/16W | R3829 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R3475 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R3830 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R3476 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3831 | 1-216-864-11 | SHORT | 0 | | |
| R3477 | 1-218-701-11 | METAL CHIP | 2.4K | 0.5% | 1/16W | R3832 | 1-216-864-11 | SHORT | 0 | | |
| R3478 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3833 | 1-216-864-11 | SHORT | 0 | | |
| R3483 | 1-218-701-11 | METAL CHIP | 2.4K | 0.5% | 1/16W | R3834 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W |
| R3484 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3835 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W |
| R3485 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3836 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W |
| R3486 | 1-216-801-11 | RES-CHIP | 22 | 5% | 1/16W | R3837 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W |
| R3489 | 1-216-864-11 | SHORT | 0 | | | R3838 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W |
| R3490 | 1-216-864-11 | SHORT | 0 | | | R3839 | 1-218-670-11 | METAL CHIP | 120 | 0.5% | 1/16W |
| R3491 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3840 | 1-216-803-11 | RES-CHIP | 33 | 5% | 1/16W |
| R3492 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3841 | 1-218-670-11 | METAL CHIP | 120 | 0.5% | 1/16W |
| R3493 | 1-218-701-11 | METAL CHIP | 2.4K | 0.5% | 1/16W | R3842 | 1-218-689-11 | METAL CHIP | 750 | 0.5% | 1/16W |
| R3495 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3846 | 1-216-801-11 | RES-CHIP | 22 | 5% | 1/16W |
| R3496 | 1-216-801-11 | RES-CHIP | 22 | 5% | 1/16W | R3847 | 1-216-801-11 | RES-CHIP | 22 | 5% | 1/16W |
| R3497 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W | R3848 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R3498 | 1-216-818-11 | RES-CHIP | 560 | 5% | 1/16W | R3849 | 1-218-675-11 | METAL CHIP | 200 | 0.5% | 1/16W |
| R3499 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3850 | 1-218-675-11 | METAL CHIP | 200 | 0.5% | 1/16W |
| R3501 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3851 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R3502 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3852 | 1-218-675-11 | METAL CHIP | 200 | 0.5% | 1/16W |
| R3503 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3854 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R3504 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3857 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R3505 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3858 | 1-218-704-11 | METAL CHIP | 3.3K | 0.5% | 1/16W |
| R3506 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3862 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R3507 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3863 | 1-218-700-11 | METAL CHIP | 2.2K | 0.5% | 1/16W |
| R3508 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3864 | 1-216-827-11 | RES-CHIP | 3.3K | 5% | 1/16W |
| R3509 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3865 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R3510 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3866 | 1-414-234-22 | FERRITE | 0UH | | |
| R3511 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3867 | 1-414-234-22 | FERRITE | 0UH | | |
| R3512 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W | R3868 | 1-414-234-22 | FERRITE | 0UH | | |
| R3800 | 1-216-864-11 | SHORT | 0 | | | R3869 | 1-218-719-11 | METAL CHIP | 13K | 0.5% | 1/16W |
| R3802 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W | R3870 | 1-218-719-11 | METAL CHIP | 13K | 0.5% | 1/16W |
| R3803 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W | R3871 | 1-218-719-11 | METAL CHIP | 13K | 0.5% | 1/16W |
| R3804 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W | R3881 | 1-216-807-11 | RES-CHIP | 68 | 5% | 1/16W |
| R3805 | 1-218-678-11 | METAL CHIP | 270 | 0.5% | 1/16W | R3882 | 1-216-807-11 | RES-CHIP | 68 | 5% | 1/16W |
| R3806 | 1-218-662-11 | METAL CHIP | 56 | 0.5% | 1/16W | R3883 | 1-216-807-11 | RES-CHIP | 68 | 5% | 1/16W |
| R3807 | 1-218-670-11 | METAL CHIP | 120 | 0.5% | 1/16W | R3915 | 1-218-644-11 | METAL CHIP | 10 | 0.5% | 1/16W |
| R3808 | 1-218-670-11 | METAL CHIP | 120 | 0.5% | 1/16W | R3916 | 1-218-644-11 | METAL CHIP | 10 | 0.5% | 1/16W |
| R3809 | 1-218-670-11 | METAL CHIP | 120 | 0.5% | 1/16W | R3917 | 1-218-644-11 | METAL CHIP | 10 | 0.5% | 1/16W |
| R3810 | 1-218-670-11 | METAL CHIP | 120 | 0.5% | 1/16W | R3923 | 1-412-363-21 | FERRITE | 0UH | | |
| R3811 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R3933 | 1-216-864-11 | SHORT | 0 | | |
| | | | | | | R3937 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |

B

U

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------------------------------|--------------|-----------------------------|----------|----------|--------------|----------------------|---------|
| R3953 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | C2019 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| R3954 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | C2020 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| R3955 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | C2021 | 1-126-960-11 | ELECT 1UF | 20% 50V |
| R3956 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | C2022 | 1-126-960-11 | ELECT 1UF | 20% 50V |
| R3957 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | C2023 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| R3958 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | C2024 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| < NETWORK RESISTOR > | | | | C2025 | 1-126-960-11 | ELECT 1UF | 20% 50V |
| RB3304 | 1-234-525-21 | RES, CHIP NETWORK 56 | | C2026 | 1-126-960-11 | ELECT 1UF | 20% 50V |
| RB3305 | 1-234-525-21 | RES, CHIP NETWORK 56 | | C2027 | 1-128-551-11 | ELECT 22UF | 20% 25V |
| RB3306 | 1-234-525-21 | RES, CHIP NETWORK 56 | | C2028 | 1-126-933-11 | ELECT 100UF | 20% 16V |
| RB3307 | 1-234-525-21 | RES, CHIP NETWORK 56 | | C2029 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| RB3401 | 1-234-524-21 | RES, CHIP NETWORK 33 | | C2030 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| RB3402 | 1-234-524-21 | RES, CHIP NETWORK 33 | | C2031 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| RB3403 | 1-234-524-21 | RES, CHIP NETWORK 33 | | C2032 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| RB3404 | 1-234-524-21 | RES, CHIP NETWORK 33 | | C2033 | 1-126-960-11 | ELECT 1UF | 20% 50V |
| RB3405 | 1-234-524-21 | RES, CHIP NETWORK 33 | | C2036 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| RB3406 | 1-234-524-21 | RES, CHIP NETWORK 33 | | C2037 | 1-165-176-11 | CERAMIC CHIP 0.047UF | 10% 16V |
| RB3407 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2038 | 1-164-816-11 | CERAMIC CHIP 220PF | 2% 50V |
| RB3408 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2040 | 1-126-933-11 | ELECT 100UF | 20% 16V |
| RB3409 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2043 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| RB3410 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2044 | 1-126-933-11 | ELECT 100UF | 20% 16 |
| RB3411 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2045 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| RB3412 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2046 | 1-125-891-11 | CERAMIC CHIP 0.47UF | 10% 10V |
| RB3421 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2048 | 1-125-891-11 | CERAMIC CHIP 0.47UF | 10% 10V |
| RB3422 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2050 | 1-125-891-11 | CERAMIC CHIP 0.47UF | 10% 10V |
| RB3423 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2052 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| RB3424 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2055 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| RB3425 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2056 | 1-125-891-11 | CERAMIC CHIP 0.47UF | 10% 10V |
| RB3426 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2060 | 1-126-933-11 | ELECT 100UF | 20% 16V |
| RB3427 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2061 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| RB3428 | 1-239-409-11 | RES, CHIP NETWORK 47 (3216) | | C2062 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| < VIBRATOR > | | | | C2069 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| X3089 | 1-781-945-21 | VIBRATOR, CERAMIC | | C2083 | 1-128-551-11 | ELECT 22UF | 20% 25V |
| X3401 | 1-781-887-21 | VIBRATOR, CRYSTAL | | C2084 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| X3402 | 1-781-579-21 | OSCILLATOR, CRYSTAL | | C2085 | 1-162-917-11 | CERAMIC CHIP 15PF | 5% 50V |
| ***** | | | | C2087 | 1-164-160-11 | CERAMIC CHIP 20PF | 5% 50V |
| * A-1373-851-A U BOARD, COMPLETE | | | | C2089 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| ***** | | | | C2090 | 1-164-227-11 | CERAMIC CHIP 0.022UF | 10% 25V |
| < CAPACITOR > | | | | C2091 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2001 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V | C2092 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2002 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V | C2094 | 1-162-964-11 | CERAMIC CHIP 0.001UF | 10% 50V |
| C2003 | 1-126-935-11 | ELECT 470UF | 20% 16V | C2096 | 1-162-917-11 | CERAMIC CHIP 15PF | 5% 50V |
| C2004 | 1-128-551-11 | ELECT 22UF | 20% 25V | C2097 | 1-162-917-11 | CERAMIC CHIP 15PF | 5% 50V |
| C2005 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V | C2098 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2006 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V | C2099 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2007 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2102 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2008 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2103 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2012 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2111 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| C2013 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2112 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2014 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2113 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2015 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2114 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| C2016 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2122 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| C2017 | 1-126-964-11 | ELECT 10UF | 20% 50V | C2128 | 1-126-964-11 | ELECT 10UF | 20% 50V |
| C2018 | 1-126-960-11 | ELECT 1UF | 20% 50V | C2342 | 1-107-826-11 | CERAMIC CHIP 0.1UF | 10% 16V |
| | | | | C2348 | 1-126-947-11 | ELECT 47UF | 20% 25V |
| | | | | C2349 | 1-162-970-11 | CERAMIC CHIP 0.01UF | 10% 25V |
| | | | | C2350 | 1-126-964-11 | ELECT 10UF | 20% 50V |



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|---------------------------|-----------------|----------|--------------|---------------------|--------|
| C2351 | 1-126-964-11 | ELECT | 10UF 20% 50V | D2040 | 8-719-800-76 | 1SS226 | |
| C2352 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V | D2041 | 8-719-800-76 | 1SS226 | |
| C2353 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | D2042 | 8-719-110-53 | RD10ESB2 | |
| C2354 | 1-137-368-11 | MYLAR | 0.0047UF 5% 50V | D2043 | 8-719-800-76 | 1SS226 | |
| C2355 | 1-137-150-11 | MYLAR | 0.01UF 5% 50V | D2044 | 8-719-800-76 | 1SS226 | |
| C2356 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | | | < FERRITE BEAD > | |
| C2357 | 1-126-933-11 | ELECT | 100UF 20% 16V | FB2001 | 1-414-760-21 | FERRITE | 0UH |
| C2358 | 1-126-933-11 | ELECT | 100UF 20% 16V | FB2002 | 1-414-445-11 | FERRITE | 0UH |
| C2359 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | | | < FILTER > | |
| C2360 | 1-137-368-11 | MYLAR | 0.0047UF 5% 50V | FL2001 | 1-239-848-11 | FILTER, LOW PASS | |
| C2365 | 1-136-169-00 | FILM | 0.22UF 5% 50V | FL2002 | 1-239-848-11 | FILTER, LOW PASS | |
| C2366 | 1-137-150-11 | MYLAR | 0.01UF 5% 50V | FL2003 | 1-239-848-11 | FILTER, LOW PASS | |
| C2367 | 1-137-368-11 | MYLAR | 0.0047UF 5% 50V | | | < IC > | |
| C2368 | 1-136-169-00 | FILM | 0.22UF 5% 50V | IC2001 | 8-759-351-01 | TEA6422DT | |
| | | < CONNECTOR > | | IC2003 | 8-759-100-96 | UPC4558G2 | |
| CN2001* | 1-793-923-11 | CONNECTOR, DIN (PLUG) 64P | | IC2004 | 8-752-080-04 | CXA2069Q | |
| CN2002* | 1-564-526-11 | PLUG, CONNECTOR 11P | | IC2007 | 8-752-394-69 | CXD2073Q-T4 | |
| | | < DIODE > | | IC2302 | 8-759-578-49 | NJM2370U10-TE2 | |
| D2001 | 8-719-110-53 | RD10ESB2 | | IC2304 | 8-759-711-10 | NJU4066BM | |
| D2002 | 8-719-110-53 | RD10ESB2 | | IC2305 | 8-759-686-15 | NJM2180M | |
| D2003 | 8-719-110-53 | RD10ESB2 | | | | < JACK > | |
| D2004 | 8-719-800-76 | 1SS226 | | J2001 | 1-573-967-12 | BLOCK, (S) TERMINAL | |
| D2005 | 8-719-800-76 | 1SS226 | | J2002 | 1-764-143-11 | JACK | |
| D2006 | 8-719-800-76 | 1SS226 | | J2003 | 1-764-143-11 | JACK | |
| D2007 | 8-719-110-53 | RD10ESB2 | | J2004 | 1-750-517-21 | JACK BLOCK, PIN 3P | |
| D2008 | 8-719-110-53 | RD10ESB2 | | J2005 | 1-815-015-11 | JACK BLOCK, PIN | |
| D2009 | 8-719-800-76 | 1SS226 | | J2006 | 1-815-015-11 | JACK BLOCK, PIN | |
| D2010 | 8-719-800-76 | 1SS226 | | J2007 | 1-750-516-21 | JACK BLOCK, PIN 2P | |
| D2011 | 8-719-800-76 | 1SS226 | | J2008 | 1-750-517-21 | JACK BLOCK, PIN 3P | |
| D2012 | 8-719-110-53 | RD10ESB2 | | | | < COIL > | |
| D2013 | 8-719-110-53 | RD10ESB2 | | L2302 | 1-469-555-21 | INDUCTOR | 10UH |
| D2014 | 8-719-110-53 | RD10ESB2 | | | | < TRANSISTOR > | |
| D2015 | 8-719-110-53 | RD10ESB2 | | Q2001 | 8-729-422-27 | 2SD601A-Q | |
| D2016 | 8-719-110-53 | RD10ESB2 | | Q2002 | 8-729-026-49 | 2SA1037AK-T146-R | |
| D2017 | 8-719-110-53 | RD10ESB2 | | Q2003 | 8-729-026-49 | 2SA1037AK-T146-R | |
| D2018 | 8-719-110-53 | RD10ESB2 | | Q2004 | 8-729-422-27 | 2SD601A-Q | |
| D2019 | 8-719-110-53 | RD10ESB2 | | Q2005 | 8-729-422-27 | 2SD601A-Q | |
| D2020 | 8-719-110-53 | RD10ESB2 | | Q2006 | 8-729-422-27 | 2SD601A-Q | |
| D2021 | 8-719-110-53 | RD10ESB2 | | Q2007 | 8-729-422-27 | 2SD601A-Q | |
| D2022 | 8-719-110-53 | RD10ESB2 | | Q2008 | 8-729-422-27 | 2SD601A-Q | |
| D2023 | 8-719-110-53 | RD10ESB2 | | Q2009 | 8-729-422-27 | 2SD601A-Q | |
| D2024 | 8-719-110-53 | RD10ESB2 | | Q2012 | 8-729-026-49 | 2SA1037AK-T146-R | |
| D2025 | 8-719-110-53 | RD10ESB2 | | Q2013 | 8-729-422-27 | 2SD601A-Q | |
| D2026 | 8-719-110-53 | RD10ESB2 | | Q2015 | 8-729-422-27 | 2SD601A-Q | |
| D2027 | 8-719-110-53 | RD10ESB2 | | Q2016 | 8-729-422-27 | 2SD601A-Q | |
| D2029 | 8-719-110-53 | RD10ESB2 | | Q2017 | 8-729-422-27 | 2SD601A-Q | |
| D2030 | 8-719-110-53 | RD10ESB2 | | Q2019 | 8-729-026-49 | 2SA1037AK-T146-R | |
| D2031 | 8-719-800-76 | 1SS226 | | Q2020 | 8-729-422-27 | 2SD601A-Q | |
| D2032 | 8-719-800-76 | 1SS226 | | Q2021 | 8-729-026-49 | 2SA1037AK-T146-R | |
| D2033 | 8-719-991-33 | ISS133T-77 | | Q2022 | 8-729-422-27 | 2SD601A-Q | |
| D2034 | 8-719-991-33 | ISS133T-77 | | Q2024 | 8-729-422-27 | 2SD601A-Q | |
| D2035 | 8-719-110-53 | RD10ESB2 | | Q2025 | 8-729-422-27 | 2SD601A-Q | |
| D2039 | 8-719-110-53 | RD10ESB2 | | | | | |



| REF. NO. | PART NO. | DESCRIPTION | REMARK | | | REF. NO. | PART NO. | DESCRIPTION | REMARK | | |
|--------------|--------------|------------------|--------|------|-------|----------|--------------|-------------|--------|------|-------|
| Q2026 | 8-729-026-49 | 2SA1037AK-T146-R | | | | R2052 | 1-216-817-11 | RES-CHIP | 470 | 5% | 1/16W |
| Q2027 | 8-729-026-49 | 2SA1037AK-T146-R | | | | R2053 | 1-216-817-11 | RES-CHIP | 470 | 5% | 1/16W |
| Q2028 | 8-729-026-49 | 2SA1037AK-T146-R | | | | R2054 | 1-216-806-11 | RES-CHIP | 56 | 5% | 1/16W |
| Q2029 | 8-729-120-28 | 2SC1623-L5L6 | | | | R2055 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| Q2301 | 8-729-422-27 | 2SD601A-Q | | | | R2056 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| < RESISTOR > | | | | | | R2057 | 1-216-806-11 | RES-CHIP | 56 | 5% | 1/16W |
| R2001 | 1-218-285-11 | RES-CHIP | 75 | 5% | 1/16W | R2058 | 1-218-716-11 | METAL CHIP | 10K | 0.5% | 1/16W |
| R2002 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2059 | 1-216-817-11 | RES-CHIP | 470 | 5% | 1/16W |
| R2003 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2060 | 1-216-817-11 | RES-CHIP | 470 | 5% | 1/16W |
| R2004 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2061 | 1-216-817-11 | RES-CHIP | 470 | 5% | 1/16W |
| R2005 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2062 | 1-216-817-11 | RES-CHIP | 470 | 5% | 1/16W |
| R2006 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2063 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2007 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2064 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2008 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2065 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R2009 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2066 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W |
| R2010 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2067 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2011 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2068 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R2012 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2069 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R2013 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2070 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R2014 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2071 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2015 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2072 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W |
| R2016 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2073 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2017 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2074 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2018 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2075 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2019 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2077 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2020 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2080 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2021 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2081 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2022 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2082 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W |
| R2023 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2084 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2024 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W | R2085 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| R2025 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2086 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W |
| R2026 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2087 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2027 | 1-218-665-11 | METAL CHIP | 75 | 0.5% | 1/16W | R2089 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2028 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2090 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| R2029 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2091 | 1-216-806-11 | RES-CHIP | 56 | 5% | 1/16W |
| R2030 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2092 | 1-216-806-11 | RES-CHIP | 56 | 5% | 1/16W |
| R2031 | 1-216-841-11 | RES-CHIP | 47K | 5% | 1/16W | R2094 | 1-216-864-11 | SHORT | 0 | | |
| R2032 | 1-216-845-11 | RES-CHIP | 100K | 5% | 1/16W | R2096 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2034 | 1-216-803-11 | RES-CHIP | 33 | 5% | 1/16W | R2097 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2035 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2098 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R2036 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2099 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2037 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2100 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R2038 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2103 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2039 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/16W | R2104 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2040 | 1-216-857-11 | RES-CHIP | 1M | 5% | 1/16W | R2105 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2041 | 1-216-842-11 | RES-CHIP | 56K | 5% | 1/16W | R2107 | 1-216-807-11 | RES-CHIP | 68 | 5% | 1/16W |
| R2042 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W | R2109 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2043 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2110 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2044 | 1-216-806-11 | RES-CHIP | 56 | 5% | 1/16W | R2111 | 1-216-825-11 | RES-CHIP | 2.2K | 5% | 1/16W |
| R2045 | 1-216-806-11 | RES-CHIP | 56 | 5% | 1/16W | R2113 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| R2046 | 1-216-818-11 | RES-CHIP | 560 | 5% | 1/16W | R2116 | 1-216-832-11 | RES-CHIP | 8.2K | 5% | 1/16W |
| R2047 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2118 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| R2048 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W | R2121 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| R2049 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2122 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| R2050 | 1-216-829-11 | RES-CHIP | 4.7K | 5% | 1/16W | R2123 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R2051 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W | R2124 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| | | | | | | R2125 | 1-218-702-11 | METAL CHIP | 2.7K | 0.5% | 1/16W |



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|-----------------------------------|--------------|--------------|------------------|
| R2128 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R2354 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R2130 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R2355 | 1-218-890-11 | RES-CHIP | 62K 5% 1/16W |
| R2131 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R2356 | 1-216-842-11 | RES-CHIP | 56K 5% 1/16W |
| R2132 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R2357 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R2133 | 1-218-674-11 | METAL CHIP | 180 0.5% 1/16W | R2358 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W |
| R2136 | 1-216-816-11 | RES-CHIP | 390 5% 1/16W | R2359 | 1-216-824-11 | RES-CHIP | 1.8K 5% 1/16W |
| R2137 | 1-218-700-11 | METAL CHIP | 2.2K 0.5% 1/16W | R2360 | 1-216-861-11 | RES-CHIP | 2.2M 5% 1/16W |
| R2138 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R2363 | 1-216-864-11 | SHORT | 0 |
| R2142 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W | R2365 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R2147 | 1-216-814-11 | RES-CHIP | 270 5% 1/16W | R2366 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R2148 | 1-218-710-11 | METAL CHIP | 5.6K 0.5% 1/16W | R2369 | 1-216-864-11 | SHORT | 0 |
| R2149 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R2376 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R2150 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R2377 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R2151 | 1-218-698-11 | METAL CHIP | 1.8K 0.5% 1/16W | R2379 | 1-216-842-11 | RES-CHIP | 56K 5% 1/16W |
| R2152 | 1-218-694-11 | METAL CHIP | 1.2K 0.5% 1/16W | R2380 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R2153 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R2381 | 1-216-831-11 | RES-CHIP | 6.8K 5% 1/16W |
| R2155 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | R2382 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R2156 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | R2383 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R2157 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R2384 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R2159 | 1-216-832-11 | RES-CHIP | 8.2K 5% 1/16W | R2385 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W |
| R2164 | 1-218-710-11 | METAL CHIP | 5.6K 0.5% 1/16W | R2386 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R2166 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W | R2387 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R2169 | 1-216-842-11 | RES-CHIP | 56K 5% 1/16W | R2390 | 1-216-847-11 | RES-CHIP | 150K 5% 1/16W |
| R2173 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W | ***** | | | |
| R2174 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W | * A-1299-523-A AD BOARD, COMPLETE | | | |
| R2175 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | ***** | | | |
| R2176 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | < CAPACITOR > | | | |
| R2177 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | C1601 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| R2178 | 1-218-676-11 | METAL CHIP | 220 0.5% 1/16W | C1604 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2182 | 1-216-864-11 | SHORT | 0 | C1605 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2183 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | C1606 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2184 | 1-218-704-11 | METAL CHIP | 3.3K 0.5% 1/16W | C1607 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| R2185 | 1-218-684-11 | METAL CHIP | 470 0.5% 1/16W | C1608 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2186 | 1-218-688-11 | METAL CHIP | 680 0.5% 1/16W | C1609 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V |
| R2187 | 1-216-864-11 | SHORT | 0 | C1610 | 1-162-962-11 | CERAMIC CHIP | 470PF 10% 50V |
| R2193 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | C1611 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2194 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | C1612 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2195 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | C1613 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2196 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | C1614 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2197 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | C1615 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2198 | 1-216-853-11 | RES-CHIP | 470K 5% 1/16W | C1616 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2199 | 1-216-853-11 | RES-CHIP | 470K 5% 1/16W | C1617 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2324 | 1-216-864-11 | SHORT | 0 | C1618 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| R2325 | 1-216-864-11 | SHORT | 0 | C1619 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2330 | 1-216-864-11 | SHORT | 0 | C1620 | 1-162-920-11 | CERAMIC CHIP | 27PF 5% 50V |
| R2331 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | C1621 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2341 | 1-216-832-11 | RES-CHIP | 8.2K 5% 1/16W | C1622 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |
| R2342 | 1-216-824-11 | RES-CHIP | 1.8K 5% 1/16W | C1623 | 1-162-915-11 | CERAMIC CHIP | 10PF 0.50PF50V |
| R2343 | 1-216-832-11 | RES-CHIP | 8.2K 5% 1/16W | C1624 | 1-162-915-11 | CERAMIC CHIP | 10PF 0.50PF50V |
| R2344 | 1-216-824-11 | RES-CHIP | 1.8K 5% 1/16W | C1625 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2345 | 1-216-864-11 | SHORT | 0 | C1626 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2346 | 1-216-864-11 | SHORT | 0 | C1627 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2347 | 1-216-843-11 | RES-CHIP | 68K 5% 1/16W | C1628 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2348 | 1-216-838-11 | RES-CHIP | 27K 5% 1/16W | C1629 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| R2349 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | | | | |
| R2350 | 1-216-797-11 | RES-CHIP | 10 5% 1/16W | | | | |
| R2353 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W | | | | |

AD

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|--------------|------------------|------------------|--------------|-------------------------------|------------------|
| C1630 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1698 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C1631 | 1-126-933-11 | ELECT | 100UF 20% 16V | C1699 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C1632 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1700 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C1633 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1701 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |
| C1634 | 1-126-963-11 | ELECT | 4.7UF 20% 50V | C1704 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C1635 | 1-162-923-11 | CERAMIC CHIP | 47PF 5% 50V | C1707 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V |
| C1636 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C1708 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V |
| C1637 | 1-162-919-11 | CERAMIC CHIP | 22PF 5% 50V | C1709 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V |
| C1638 | 1-162-919-11 | CERAMIC CHIP | 22PF 5% 50V | C1711 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V |
| C1639 | 1-126-933-11 | ELECT | 100UF 20% 16V | C1712 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C1640 | 1-126-933-11 | ELECT | 100UF 20% 16V | C1714 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C1641 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1715 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C1643 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1717 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V |
| C1644 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1718 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C1645 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V | C1720 | 1-162-910-11 | CERAMIC CHIP | 5PF 0.25PF 50V |
| C1646 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V | C1721 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V |
| C1647 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V | C1722 | 1-162-910-11 | CERAMIC CHIP | 5PF 0.25PF 50V |
| C1649 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V | C1730 | 1-126-916-11 | ELECT | 1000UF 20% 6.3V |
| C1651 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1731 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C1652 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1732 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C1656 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1733 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C1657 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C1734 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C1658 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | < CONNECTOR > | | | |
| C1659 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | CN1601 | 1-573-301-21 | CONNECTOR, BOARD TO BOARD 20P | |
| C1661 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | CN1602 | 1-573-301-21 | CONNECTOR, BOARD TO BOARD 20P | |
| C1663 | 1-126-933-11 | ELECT | 100UF 20% 16V | < DIODE > | | | |
| C1664 | 1-126-933-11 | ELECT | 100UF 20% 16V | D1601 | 8-719-404-50 | MA111-TX | |
| C1665 | 1-126-933-11 | ELECT | 100UF 20% 16V | D1603 | 8-719-404-50 | MA111-TX | |
| C1666 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | D1604 | 8-719-069-54 | UDZSTE-175.1B | |
| C1668 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | D1605 | 8-719-069-54 | UDZSTE-175.1B | |
| C1669 | 1-162-910-11 | CERAMIC CHIP | 5PF 0.25PF 50V | D1606 | 8-719-069-54 | UDZSTE-175.1B | |
| C1670 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | D1607 | 8-719-069-54 | UDZSTE-175.1B | |
| C1671 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | < FERRITE BEAD > | | | |
| C1672 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1601 | 1-414-445-11 | FERRITE | 0UH |
| C1673 | 1-162-910-11 | CERAMIC CHIP | 5PF 0.25PF 50V | FB1602 | 1-414-445-11 | FERRITE | 0UH |
| C1674 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V | FB1603 | 1-414-445-11 | FERRITE | 0UH |
| C1675 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V | FB1604 | 1-414-445-11 | FERRITE | 0UH |
| C1676 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V | FB1605 | 1-414-445-11 | FERRITE | 0UH |
| C1677 | 1-126-933-11 | ELECT | 100UF 20% 16V | FB1606 | 1-414-445-11 | FERRITE | 0UH |
| C1678 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V | FB1607 | 1-414-445-11 | FERRITE | 0UH |
| C1680 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1608 | 1-414-445-11 | FERRITE | 0UH |
| C1681 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1609 | 1-414-445-11 | FERRITE | 0UH |
| C1682 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1610 | 1-414-445-11 | FERRITE | 0UH |
| C1683 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1611 | 1-414-445-11 | FERRITE | 0UH |
| C1684 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1612 | 1-414-445-11 | FERRITE | 0UH |
| C1685 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1613 | 1-414-445-11 | FERRITE | 0UH |
| C1688 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | FB1614 | 1-414-445-11 | FERRITE | 0UH |
| C1690 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | FB1615 | 1-414-445-11 | FERRITE | 0UH |
| C1691 | 1-126-933-11 | ELECT | 100UF 20% 16V | FB1616 | 1-414-445-11 | FERRITE | 0UH |
| C1692 | 1-126-933-11 | ELECT | 100UF 20% 16V | FB1617 | 1-414-445-11 | FERRITE | 0UH |
| C1693 | 1-126-933-11 | ELECT | 100UF 20% 16V | < IC > | | | |
| C1694 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | IC1601 | 8-759-683-55 | IC CM0017AF | |
| C1695 | 1-162-910-11 | CERAMIC CHIP | 5PF 0.25PF 50V | | | | |
| C1696 | 1-162-910-11 | CERAMIC CHIP | 5PF 0.25PF 50V | | | | |
| C1697 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | | | | |

AD

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|------------------|----------|----------|--------------|-----------------|------------|
| IC1602 | 8-759-830-08 | IC NJM2068V-TE2 | | R1651 | 1-216-815-11 | RES-CHIP 330 | 5% 1/16W |
| IC1603 | 8-759-830-08 | IC NJM2068V-TE2 | | R1652 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W |
| IC1605 | 8-759-352-91 | PST9143NL | | R1653 | 1-216-817-11 | RES-CHIP 470 | 5% 1/16W |
| IC1606 | 8-752-925-71 | IC CXP86448-635Q | | R1654 | 1-216-829-11 | RES-CHIP 4.7K | 5% 1/16W |
| | | | | R1655 | 1-218-700-11 | METAL CHIP 2.2K | 0.5% 1/16W |
| IC1607 | 8-759-682-41 | M24C32-WMN6T(A) | | R1656 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| IC1608 | 8-759-829-87 | IC CD0031AM | | R1657 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W |
| IC1609 | 8-759-830-08 | IC NJM2068V-TE2 | | R1658 | 1-216-837-11 | RES-CHIP 22K | 5% 1/16W |
| IC1610 | 8-759-830-08 | IC NJM2068V-TE2 | | R1659 | 1-216-837-11 | RES-CHIP 22K | 5% 1/16W |
| IC1611 | 8-759-830-08 | IC NJM2068V-TE2 | | R1660 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W |
| IC1612 | 8-759-830-08 | IC NJM2068V-TE2 | | | | | |
| | | < COIL > | | R1661 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W |
| L1601 | 1-469-555-21 | INDUCTOR 10UH | | R1662 | 1-216-827-11 | RES-CHIP 3.3K | 5% 1/16W |
| L1602 | 1-469-555-21 | INDUCTOR 10UH | | R1663 | 1-216-818-11 | RES-CHIP 560 | 5% 1/16W |
| | | < TRANSISTOR > | | R1665 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| Q1603 | 8-729-422-27 | 2SD601A-Q | | R1666 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| Q1604 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q1605 | 8-729-422-27 | 2SD601A-Q | | R1667 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| Q1606 | 8-729-422-27 | 2SD601A-Q | | R1668 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| | | < RESISTOR > | | R1669 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1601 | 1-216-841-11 | RES-CHIP 47K | 5% 1/16W | R1670 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1604 | 1-216-833-11 | RES-CHIP 10K | 5% 1/16W | R1671 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1605 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | | | | |
| R1606 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1672 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1607 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1673 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1608 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1674 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1609 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1675 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1611 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | R1676 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W |
| R1614 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | | | | |
| R1615 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1681 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1618 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1682 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1619 | 1-216-864-11 | SHORT 0 | | R1683 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1620 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1684 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1621 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1685 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1622 | 1-216-817-11 | RES-CHIP 470 | 5% 1/16W | | | | |
| R1623 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1690 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1625 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1691 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1627 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1692 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1634 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1693 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1635 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1694 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1636 | 1-216-833-11 | RES-CHIP 10K | 5% 1/16W | | | | |
| R1637 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1695 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1638 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1696 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1639 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1697 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1640 | 1-216-837-11 | RES-CHIP 22K | 5% 1/16W | R1698 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1641 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | R1699 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1642 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | | | | |
| R1643 | 1-216-821-11 | RES-CHIP 1K | 5% 1/16W | R1700 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1644 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | R1701 | 1-218-692-11 | METAL CHIP 1K | 0.5% 1/16W |
| R1645 | 1-216-815-11 | RES-CHIP 330 | 5% 1/16W | R1702 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1646 | 1-216-825-11 | RES-CHIP 2.2K | 5% 1/16W | R1703 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1647 | 1-216-833-11 | RES-CHIP 10K | 5% 1/16W | R1704 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| R1648 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | | | | |
| R1649 | 1-216-809-11 | RES-CHIP 100 | 5% 1/16W | R1705 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| R1650 | 1-216-815-11 | RES-CHIP 330 | 5% 1/16W | R1706 | 1-218-724-11 | METAL CHIP 22K | 0.5% 1/16W |
| | | | | R1707 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| | | | | R1708 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| | | | | R1709 | 1-218-716-11 | METAL CHIP 10K | 0.5% 1/16W |
| | | | | | | | |
| | | | | R1710 | 1-216-864-11 | SHORT 0 | |
| | | | | R1711 | 1-216-833-11 | RES-CHIP 10K | 5% 1/16W |
| | | | | R1712 | 1-216-833-11 | RES-CHIP 10K | 5% 1/16W |
| | | | | R1713 | 1-216-833-11 | RES-CHIP 10K | 5% 1/16W |
| | | | | R1714 | 1-216-833-11 | RES-CHIP 10K | 5% 1/16W |



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---------------------------------------|--------------|-----------------------|----------------|----------|--------------|--------------|------------------|
| < NETWORK RESISTOR > | | | | C44 | 1-126-947-11 | ELECT | 47UF 20% 16V |
| RB1603 | 1-233-576-11 | RES, CHIP NETWORK 100 | | C45 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |
| RB1604 | 1-233-576-11 | RES, CHIP NETWORK 100 | | C46 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V |
| RB1605 | 1-233-576-11 | RES, CHIP NETWORK 100 | | C47 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |
| < VIBRATOR > | | | | C49 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| X1601 | 1-767-925-21 | VIBRATOR, CRYSTAL | | C50 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |
| ***** | | | | C51 | 1-126-947-11 | ELECT | 47UF 20% 16V |
| * A-1299-428-A A BOARD, COMPLETE | | | | C52 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V |
| ***** | | | | C53 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| 4-382-854-11 SCREW (M3X10), P, SW (+) | | | | C54 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |
| < CAPACITOR > | | | | C55 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |
| C1 | 1-126-933-11 | ELECT | 100UF 20% 16V | C56 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C2 | 1-104-665-11 | ELECT | 100UF 20% 25V | C57 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C3 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C59 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C4 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C60 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C5 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C61 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C6 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C62 | 1-126-947-11 | ELECT | 47UF 20% 16V |
| C7 | 1-126-933-11 | ELECT | 100UF 20% 16V | C63 | 1-126-935-11 | ELECT | 470UF 20% 6.3V |
| C8 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C65 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C9 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V | C66 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C10 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C67 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C11 | 1-126-933-11 | ELECT | 100UF 20% 16V | C68 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C12 | 1-126-933-11 | ELECT | 100UF 20% 16V | C69 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C13 | 1-164-392-11 | CERAMIC CHIP | 390PF 5% 50V | C70 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C14 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C73 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C15 | 1-164-392-11 | CERAMIC CHIP | 390PF 5% 50V | C74 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C16 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | C75 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C17 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C76 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V |
| C18 | 1-162-975-11 | CERAMIC CHIP | 24PF 5% 50V | C77 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C19 | 1-162-975-11 | CERAMIC CHIP | 24PF 5% 50V | C78 | 1-104-665-11 | ELECT | 100UF 20% 25V |
| C20 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C79 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C21 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C80 | 1-126-967-11 | ELECT | 47UF 20% 50V |
| C22 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C81 | 1-104-665-11 | ELECT | 100UF 20% 10V |
| C23 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C82 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C24 | 1-126-947-11 | ELECT | 47UF 20% 16V | C83 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C26 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C84 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C27 | 1-126-947-11 | ELECT | 47UF 20% 16V | C85 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C28 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C86 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V |
| C29 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C87 | 1-126-960-11 | ELECT | 1UF 20% 50V |
| C30 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C88 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C31 | 1-126-947-11 | ELECT | 47UF 20% 16V | C90 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C33 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C92 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C34 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C93 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C35 | 1-126-947-11 | ELECT | 47UF 20% 16V | C94 | 1-164-346-11 | CERAMIC CHIP | 1UF 16V |
| C36 | 1-126-934-11 | ELECT | 220UF 20% 10V | C95 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V |
| C37 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C96 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C38 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C97 | 1-164-315-11 | CERAMIC CHIP | 470PF 5% 50V |
| C39 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C98 | 1-126-960-11 | ELECT | 1UF 20% 50V |
| C40 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C99 | 1-165-176-11 | CERAMIC CHIP | 0.047UF 10% 16V |
| C41 | 1-126-934-11 | ELECT | 220UF 20% 10V | C101 | 1-162-960-11 | CERAMIC CHIP | 220PF 10% 50V |
| C42 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C102 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C43 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C103 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| | | | | C104 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| | | | | C105 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| | | | | C106 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| | | | | C108 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |
| | | | | C109 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |


A


| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|--------------|------------------|----------|--------------|--------------|------------------|
| C110 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C329 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C111 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C330 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V |
| C112 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C331 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C113 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C332 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C115 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V | C333 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C116 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V | C334 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C119 | 1-126-933-11 | ELECT | 100UF 20% 16V | C335 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C120 | 1-126-933-11 | ELECT | 100UF 20% 16V | C336 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C123 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V | C337 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C124 | 1-164-346-11 | CERAMIC CHIP | 1UF 16V | C338 | 1-126-963-11 | ELECT | 4.7UF 20% 50V |
| C125 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C339 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C128 | 1-162-960-11 | CERAMIC CHIP | 220PF 10% 50V | C340 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C129 | 1-165-176-11 | CERAMIC CHIP | 0.047UF 10% 16V | C341 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |
| C130 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V | C342 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C131 | 1-126-961-11 | ELECT | 2.2UF 20% 50V | C343 | 1-126-963-11 | ELECT | 4.7UF 20% 50V |
| C132 | 1-126-935-11 | ELECT | 470UF 20% 16V | C344 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C133 | 1-126-964-11 | ELECT | 10UF 20% 50V | C345 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C134 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C346 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C135 | 1-126-964-11 | ELECT | 10UF 20% 50V | C347 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C136 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C348 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C137 | 1-126-964-11 | ELECT | 10UF 20% 50V | C349 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C138 | 1-126-964-11 | ELECT | 10UF 20% 50V | C350 | 1-126-935-11 | ELECT | 470UF 20% 16V |
| C139 | 1-126-964-11 | ELECT | 10UF 20% 50V | C351 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C140 | 1-126-933-11 | ELECT | 100UF 20% 16V | C352 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C141 | 1-126-933-11 | ELECT | 100UF 20% 16V | C353 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C142 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C354 | 1-126-963-11 | ELECT | 4.7UF 20% 50V |
| C143 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C355 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C144 | 1-126-964-11 | ELECT | 10UF 20% 50V | C356 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C145 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V | C357 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C301 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V | C358 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |
| C302 | 1-125-837-91 | CERAMIC CHIP | 1UF 10% 6.3V | C359 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C303 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C360 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |
| C304 | 1-164-315-11 | CERAMIC CHIP | 470PF 5% 50V | C361 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C305 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V | C362 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C306 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C363 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C307 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C364 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C308 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C365 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C309 | 1-126-933-11 | ELECT | 100UF 20% 16V | C366 | 1-125-837-91 | CERAMIC CHIP | 1UF 10% 6.3V |
| C310 | 1-126-964-11 | ELECT | 10UF 20% 50V | C367 | 1-125-837-91 | CERAMIC CHIP | 1UF 10% 6.3V |
| C311 | 1-126-933-11 | ELECT | 100UF 20% 16V | C368 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C312 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C369 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C313 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C370 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C314 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C371 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C315 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C372 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C316 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V | C373 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C317 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C374 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C318 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C375 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C319 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C376 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C320 | 1-126-963-11 | ELECT | 4.7UF 20% 50V | C377 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C321 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C378 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C322 | 1-126-933-11 | ELECT | 100UF 20% 16V | C379 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C323 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C380 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V |
| C324 | 1-125-837-91 | CERAMIC CHIP | 1UF 10% 6.3V | C381 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C325 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C382 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C326 | 1-164-315-11 | CERAMIC CHIP | 470PF 5% 50V | C383 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C327 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V | C384 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C328 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C385 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|--------------|-----------------|----------|--------------|--------------|------------------|
| C386 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C470 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V |
| C387 | 1-126-964-11 | ELECT | 10UF 20% 50V | C472 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C388 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C476 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C389 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C477 | 1-127-760-11 | CERAMIC CHIP | 4.7UF 10% 6.3V |
| C390 | 1-126-964-11 | ELECT | 10UF 20% 50V | C478 | 1-216-864-11 | SHORT | 0 |
| C391 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C479 | 1-162-923-11 | CERAMIC CHIP | 47PF 5% 50V |
| C392 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C480 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C393 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C481 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C394 | 1-126-933-11 | ELECT | 100UF 20% 16V | C482 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C395 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C483 | 1-162-968-11 | CERAMIC CHIP | 0.0047UF 10% 50V |
| C396 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C484 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C397 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | C485 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C398 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C486 | 1-115-467-11 | CERAMIC CHIP | 0.22UF 10% 10V |
| C399 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V | C488 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C400 | 1-126-933-11 | ELECT | 100UF 20% 16V | C489 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V |
| C401 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V | C490 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C402 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C494 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C403 | 1-126-947-11 | ELECT | 47UF 20% 16V | C495 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C404 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C497 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C405 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C498 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C406 | 1-127-760-11 | CERAMIC CHIP | 4.7UF 10% 6.3V | C500 | 1-164-816-11 | CERAMIC CHIP | 220PF 2% 50V |
| C407 | 1-127-760-11 | CERAMIC CHIP | 4.7UF 10% 6.3V | C501 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V |
| C408 | 1-127-760-11 | CERAMIC CHIP | 4.7UF 10% 6.3V | C502 | 1-164-816-11 | CERAMIC CHIP | 220PF 2% 50V |
| C410 | 1-126-933-11 | ELECT | 100UF 20% 16V | C503 | 1-164-816-11 | CERAMIC CHIP | 220PF 2% 50V |
| C411 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C504 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V |
| C412 | 1-125-837-91 | CERAMIC CHIP | 1UF 10% 6.3V | C505 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V |
| C413 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C506 | 1-164-816-11 | CERAMIC CHIP | 220PF 2% 50V |
| C414 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V | C507 | 1-162-966-11 | CERAMIC CHIP | 0.0022UF 10% 50V |
| C415 | 1-125-837-91 | CERAMIC CHIP | 1UF 10% 6.3V | C701 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C416 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C702 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C417 | 1-126-933-11 | ELECT | 100UF 20% 16V | C703 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C418 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C704 | 1-126-947-11 | ELECT | 47UF 20% 25V |
| C419 | 1-126-933-11 | ELECT | 100UF 20% 16V | C705 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C420 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C706 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C421 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V | C707 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C422 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C708 | 1-104-665-11 | ELECT | 100UF 20% 10V |
| C426 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C709 | 1-162-920-11 | CERAMIC CHIP | 27PF 5% 50V |
| C430 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C710 | 1-162-919-11 | CERAMIC CHIP | 22PF 5% 50V |
| C431 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C713 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |
| C435 | 1-126-933-11 | ELECT | 100UF 20% 16V | C714 | 1-162-917-11 | CERAMIC CHIP | 15PF 5% 50V |
| C438 | 1-126-933-11 | ELECT | 100UF 20% 16V | C719 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V |
| C439 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C722 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C440 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C728 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C442 | 1-135-834-91 | CERAMIC CHIP | 2.2E+06PF 6.3V | C730 | 1-162-915-11 | CERAMIC CHIP | 10PF 0.50PF 50V |
| C443 | 1-126-933-11 | ELECT | 100UF 20% 16V | C731 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V |
| C444 | 1-110-563-11 | CERAMIC CHIP | 0.068UF 10% 16V | C732 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V |
| C449 | 1-125-837-91 | CERAMIC CHIP | 1UF 10% 6.3V | C733 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V |
| C455 | 1-130-495-00 | MYLAR | 0.1UF 5% 50V | C735 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C457 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C736 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C458 | 1-136-244-11 | FILM | 0.1UF 5% 50V | C737 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C460 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C738 | 1-126-933-11 | ELECT | 100UF 20% 16V |
| C461 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C739 | 1-126-959-11 | ELECT | 0.47UF 20% 50V |
| C463 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C740 | 1-126-963-11 | ELECT | 4.7UF 20% 50V |
| C464 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C741 | 1-126-963-11 | ELECT | 4.7UF 20% 50V |
| C466 | 1-162-923-11 | CERAMIC CHIP | 47PF 5% 50V | C742 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C467 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C745 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V |
| C468 | 1-125-891-11 | CERAMIC CHIP | 0.47UF 10% 10V | | | | |

- 114 -






Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|------------|--------------|-------------------|--------|
| FB4 | 1-414-445-11 | FERRITE | 0UH |
| FB5 | 1-216-864-11 | SHORT | 0 |
| FB6 | 1-414-445-11 | FERRITE | 0UH |
| FB301 | 1-414-760-21 | FERRITE | 0UH |
| < FILTER > | | | |
| FL3 | 1-233-512-21 | FERRITE | 37UH |
| FL4 | 1-239-848-11 | FILTER, LOW PASS | |
| FL5 | 1-239-848-11 | FILTER, LOW PASS | |
| FL6 | 1-239-848-11 | FILTER, LOW PASS | |
| FL7 | 1-239-848-11 | FILTER, LOW PASS | |
| < IC > | | | |
| IC1 | 8-759-445-59 | BA033T | |
| IC2 | 8-759-198-03 | PQ09RF21 | |
| IC3 | 8-759-830-08 | IC NJM2068V-TE2 | |
| IC4 | 8-759-568-27 | MSM514265C-60JS | |
| IC5 | 8-759-100-96 | UPC4558G2 | |
| IC6 | 8-759-594-44 | UPD64082GF-3BA | |
| IC7 | 8-759-100-96 | UPC4558G2 | |
| IC8 | 8-759-445-59 | BA033T | |
| IC9 | 8-759-231-58 | TA7812S | |
| IC10 | 8-759-100-96 | UPC4558G2 | |
| IC11 | 8-759-100-96 | UPC4558G2 | |
| IC12 | 8-759-833-12 | IC NJM2395AF05 | |
| IC301 | 8-752-089-50 | CXA2103Q | |
| IC302 | 8-752-916-40 | CXP85840A-039Q | |
| IC303 | 8-752-089-50 | CXA2103Q | |
| IC304 | 8-752-916-40 | CXP85840A-039Q | |
| IC305 | 8-759-595-97 | SN74LV4053ANSR | |
| IC306 | 8-752-093-84 | CXA2151Q | |
| IC307 | 8-759-595-97 | SN74LV4053ANSR | |
| IC308 | 8-752-395-13 | CXD2085M-T4 | |
| IC309 | 8-752-100-25 | CXA2150AQ | |
| IC310 | 8-759-349-11 | PST9145NL | |
| IC311 | 8-759-700-07 | NJM2903M | |
| IC312 | 8-759-082-58 | TC7W08FU | |
| IC701 | 8-759-349-11 | PST9145NL | |
| IC702 | 8-759-575-71 | IC M24C04-WM6T | |
| IC703 | 8-759-675-64 | IC M24C08-MN6T(A) | |
| IC704 | 8-759-833-74 | IC M306V2ME-175FP | |
| IC705 | 8-752-068-37 | CXA1726AM | |
| IC706 | 8-752-068-37 | CXA1726AM | |
| IC707 | 8-759-100-96 | UPC4558G2 | |
| IC708 | 8-759-190-89 | TDA7265 | |
| IC709 | 8-759-830-08 | IC NJM2068V-TE2 | |
| IC710 | 8-759-830-08 | IC NJM2068V-TE2 | |
| IC711 | 8-759-690-57 | BH3868BFS-E2 | |
| < COIL > | | | |
| L1 | 1-414-181-11 | INDUCTOR | 4.7UH |
| L2 | 1-412-058-11 | INDUCTOR | 10UH |
| L3 | 1-412-058-11 | INDUCTOR | 10UH |
| L4 | 1-412-058-11 | INDUCTOR | 10UH |
| L5 | 1-414-193-41 | INDUCTOR | 220UH |
| L6 | 1-412-058-11 | INDUCTOR | 10UH |
| L7 | 1-414-856-11 | INDUCTOR | 10UH |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------------|--|------------------|--------|
| L8 | 1-414-856-11 | INDUCTOR | 10UH |
| L9 | 1-414-856-11 | INDUCTOR | 10UH |
| L10 | 1-412-537-31 | INDUCTOR | 100UH |
| L11 | 1-414-856-11 | INDUCTOR | 10UH |
| L12 | 1-414-856-11 | INDUCTOR | 10UH |
| L13 | 1-414-856-11 | INDUCTOR | 10UH |
| L301 | 1-469-555-21 | INDUCTOR | 10UH |
| L302 | 1-469-555-21 | INDUCTOR | 10UH |
| L303 | 1-469-555-21 | INDUCTOR | 10UH |
| L304 | 1-469-555-21 | INDUCTOR | 10UH |
| L305 | 1-469-555-21 | INDUCTOR | 10UH |
| L306 | 1-414-193-41 | INDUCTOR | 220UH |
| L307 | 1-469-555-21 | INDUCTOR | 10UH |
| L308 | 1-414-856-11 | INDUCTOR | 10UH |
| L309 | 1-469-555-21 | INDUCTOR | 10UH |
| L310 | 1-469-555-21 | INDUCTOR | 10UH |
| L311 | 1-469-555-21 | INDUCTOR | 10UH |
| L312 | 1-469-555-21 | INDUCTOR | 10UH |
| L313 | 1-414-856-11 | INDUCTOR | 10UH |
| L314 | 1-469-555-21 | INDUCTOR | 10UH |
| L315 | 1-469-555-21 | INDUCTOR | 10UH |
| L316 | 1-414-856-11 | INDUCTOR | 10UH |
| L317 | 1-414-856-11 | INDUCTOR | 10UH |
| L321 | 1-414-856-11 | INDUCTOR | 10UH |
| L701 | 1-414-179-21 | INDUCTOR | 2.2UH |
| L702 | 1-412-911-11 | FERRITE | 0UH |
| L704 | 1-469-555-21 | INDUCTOR | 10UH |
| L705 | 1-469-555-21 | INDUCTOR | 10UH |
| < NEON LAMP > | | | |
| NL701 | 1-517-778-21 | LAMP, NEON | |
| NL702 | 1-517-778-21 | LAMP, NEON | |
| NL703 | 1-517-778-21 | LAMP, NEON | |
| < IC LINK > | | | |
| PS1 |  1-532-679-00 | LINK, IC | |
| PS2 |  1-532-685-00 | LINK, IC | |
| PS3 |  1-532-679-00 | LINK, IC | |
| PS701 |  1-576-336-21 | LINK, IC | |
| PS702 |  1-576-336-21 | LINK, IC | |
| < TRANSISTOR > | | | |
| Q1 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q2 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q3 | 8-729-422-27 | 2SD601A-Q | |
| Q4 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q5 | 8-729-422-27 | 2SD601A-Q | |
| Q6 | 8-729-422-27 | 2SD601A-Q | |
| Q7 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q11 | 8-729-422-27 | 2SD601A-Q | |
| Q12 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q13 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q14 | 8-729-422-27 | 2SD601A-Q | |
| Q15 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q16 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q17 | 8-729-422-27 | 2SD601A-Q | |

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|------------------|--------|----------|--------------|------------------|--------|
| Q18 | 8-729-422-27 | 2SD601A-Q | | Q347 | 8-729-122-63 | 2SA1226 | |
| Q19 | 8-729-422-27 | 2SD601A-Q | | Q348 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q20 | 8-729-422-27 | 2SD601A-Q | | Q349 | 8-729-422-27 | 2SD601A-Q | |
| Q21 | 8-729-026-49 | 2SA1037AK-T146-R | | | | | |
| Q22 | 8-729-422-27 | 2SD601A-Q | | Q350 | 8-729-422-27 | 2SD601A-Q | |
| | | | | Q351 | 8-729-122-63 | 2SA1226 | |
| Q23 | 8-729-422-27 | 2SD601A-Q | | Q352 | 8-729-422-27 | 2SD601A-Q | |
| Q24 | 8-729-422-27 | 2SD601A-Q | | Q353 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q25 | 8-729-422-27 | 2SD601A-Q | | Q354 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q26 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q27 | 8-729-422-27 | 2SD601A-Q | | Q355 | 8-729-422-27 | 2SD601A-Q | |
| | | | | Q356 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q28 | 8-729-026-49 | 2SA1037AK-T146-R | | Q357 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q301 | 8-729-422-27 | 2SD601A-Q | | Q358 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q302 | 8-729-422-27 | 2SD601A-Q | | Q361 | 8-729-422-27 | 2SD601A-Q | |
| Q303 | 8-729-026-49 | 2SA1037AK-T146-R | | | | | |
| Q304 | 8-729-422-27 | 2SD601A-Q | | Q363 | 8-729-422-27 | 2SD601A-Q | |
| | | | | Q367 | 8-729-122-63 | 2SA1226 | |
| Q305 | 8-729-422-27 | 2SD601A-Q | | Q368 | 8-729-422-27 | 2SD601A-Q | |
| Q306 | 8-729-422-27 | 2SD601A-Q | | Q369 | 1-801-806-11 | TR DTC144EKA | |
| Q307 | 8-729-422-27 | 2SD601A-Q | | Q373 | 8-729-422-27 | 2SD601A-Q | |
| Q308 | 8-729-026-49 | 2SA1037AK-T146-R | | | | | |
| Q309 | 8-729-422-27 | 2SD601A-Q | | Q374 | 8-729-422-27 | 2SD601A-Q | |
| | | | | Q378 | 8-729-422-27 | 2SD601A-Q | |
| Q310 | 8-729-422-27 | 2SD601A-Q | | Q379 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q311 | 8-729-422-27 | 2SD601A-Q | | Q380 | 8-729-422-27 | 2SD601A-Q | |
| Q312 | 8-729-026-49 | 2SA1037AK-T146-R | | Q381 | 8-729-422-27 | 2SD601A-Q | |
| Q313 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q314 | 8-729-422-27 | 2SD601A-Q | | Q701 | 8-729-422-27 | 2SD601A-Q | |
| | | | | Q702 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q315 | 8-729-422-27 | 2SD601A-Q | | Q703 | 8-729-422-27 | 2SD601A-Q | |
| Q316 | 8-729-422-27 | 2SD601A-Q | | Q704 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q317 | 8-729-422-27 | 2SD601A-Q | | Q705 | 8-729-422-27 | 2SD601A-Q | |
| Q318 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q319 | 8-729-422-27 | 2SD601A-Q | | Q706 | 8-729-026-49 | 2SA1037AK-T146-R | |
| | | | | Q707 | 1-801-806-11 | TR DTC144EKA | |
| Q320 | 8-729-422-27 | 2SD601A-Q | | Q708 | 8-729-422-27 | 2SD601A-Q | |
| Q321 | 8-729-422-27 | 2SD601A-Q | | Q709 | 8-729-422-27 | 2SD601A-Q | |
| Q322 | 8-729-422-27 | 2SD601A-Q | | Q710 | 8-729-422-27 | 2SD601A-Q | |
| Q323 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q324 | 8-729-422-27 | 2SD601A-Q | | Q712 | 8-729-026-49 | 2SA1037AK-T146-R | |
| | | | | Q713 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q325 | 8-729-026-49 | 2SA1037AK-T146-R | | Q714 | 8-729-027-38 | DTA144EKA-T146 | |
| Q326 | 8-729-026-49 | 2SA1037AK-T146-R | | Q715 | 8-729-422-27 | 2SD601A-Q | |
| Q327 | 8-729-026-49 | 2SA1037AK-T146-R | | Q716 | 8-729-422-27 | 2SD601A-Q | |
| Q328 | 8-729-026-49 | 2SA1037AK-T146-R | | | | | |
| Q329 | 8-729-026-49 | 2SA1037AK-T146-R | | Q717 | 8-729-422-27 | 2SD601A-Q | |
| | | | | Q718 | 8-729-422-27 | 2SD601A-Q | |
| Q330 | 8-729-026-49 | 2SA1037AK-T146-R | | Q721 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q331 | 8-729-026-49 | 2SA1037AK-T146-R | | Q722 | 8-729-422-27 | 2SD601A-Q | |
| Q332 | 8-729-026-49 | 2SA1037AK-T146-R | | Q723 | 8-729-422-27 | 2SD601A-Q | |
| Q333 | 8-729-026-49 | 2SA1037AK-T146-R | | | | | |
| Q334 | 8-729-026-49 | 2SA1037AK-T146-R | | Q724 | 8-729-422-27 | 2SD601A-Q | |
| | | | | Q725 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q335 | 8-729-422-27 | 2SD601A-Q | | Q726 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q336 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q337 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q338 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q339 | 8-729-422-27 | 2SD601A-Q | | | | | |
| | | | | | | | |
| Q340 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q341 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q342 | 8-729-422-27 | 2SD601A-Q | | | | | |
| Q343 | 8-729-122-63 | 2SA1226 | | | | | |
| Q344 | 8-729-026-49 | 2SA1037AK-T146-R | | | | | |
| | | | | | | | |
| Q345 | 8-729-026-49 | 2SA1037AK-T146-R | | | | | |
| Q346 | 8-729-422-27 | 2SD601A-Q | | | | | |

< RESISTOR >

| | | | | | |
|----|--------------|-------------|-----|----|-------|
| R1 | 1-216-464-11 | METAL OXIDE | 18K | 5% | 2W |
| R2 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| R3 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| R4 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| R5 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| | | | | | |
| R6 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| R7 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/16W |
| R8 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| R9 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|----------|--------------|-------------|----------------|
| R10 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R75 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R11 | 1-218-720-11 | METAL CHIP | 15K 0.5% 1/16W | R76 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W |
| R12 | 1-218-722-11 | METAL CHIP | 18K 0.5% 1/16W | R77 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R13 | 1-218-740-11 | METAL CHIP | 100K 0.5% 1/16W | R78 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W |
| R14 | 1-218-295-11 | RES-CHIP | 43K 5% 1/16W | R79 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W |
| R15 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R80 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W |
| R16 | 1-218-702-11 | METAL CHIP | 2.7K 0.5% 1/16W | R81 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R17 | 1-218-706-11 | METAL CHIP | 3.9K 0.5% 1/16W | R82 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R18 | 1-218-714-11 | METAL CHIP | 8.2K 0.5% 1/16W | R85 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W |
| R19 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R87 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R20 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R88 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W |
| R21 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W | R89 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| R22 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R90 | 1-216-864-11 | SHORT | 0 |
| R23 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R91 | 1-216-864-11 | SHORT | 0 |
| R24 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R92 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W |
| R25 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R93 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W |
| R26 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R95 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W |
| R27 | 1-218-707-11 | METAL CHIP | 4.3K 0.5% 1/16W | R96 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W |
| R29 | 1-216-864-11 | SHORT | 0 | R99 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R30 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R100 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R31 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R102 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W |
| R32 | 1-216-864-11 | SHORT | 0 | R103 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R33 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R104 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R37 | 1-216-853-11 | RES-CHIP | 470K 5% 1/16W | R105 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R39 | 1-216-855-11 | RES-CHIP | 680K 5% 1/16W | R107 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R40 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R108 | 1-216-818-11 | RES-CHIP | 560 5% 1/16W |
| R42 | 1-216-855-11 | RES-CHIP | 680K 5% 1/16W | R109 | 1-216-807-11 | RES-CHIP | 68 5% 1/16W |
| R43 | 1-216-853-11 | RES-CHIP | 470K 5% 1/16W | R110 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R44 | 1-249-377-11 | CARBON | 0.47 5% 1/4W | R111 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R46 | 1-216-822-11 | RES-CHIP | 1.2K 5% 1/16W | R112 | 1-216-857-11 | RES-CHIP | 1M 5% 1/16W |
| R48 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R113 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R49 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R114 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R50 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R115 | 1-216-820-11 | RES-CHIP | 820 5% 1/16W |
| R51 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R116 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R52 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R117 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R53 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R118 | 1-216-820-11 | RES-CHIP | 820 5% 1/16W |
| R54 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R119 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R55 | 1-216-822-11 | RES-CHIP | 1.2K 5% 1/16W | R120 | 1-216-834-11 | RES-CHIP | 12K 5% 1/16W |
| R56 | 1-216-805-11 | RES-CHIP | 47 5% 1/16W | R121 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W |
| R57 | 1-216-805-11 | RES-CHIP | 47 5% 1/16W | R122 | 1-216-820-11 | RES-CHIP | 820 5% 1/16W |
| R59 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R123 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R60 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R124 | 1-216-834-11 | RES-CHIP | 12K 5% 1/16W |
| R61 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R125 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W |
| R62 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R126 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R63 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R127 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W |
| R64 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | R128 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R65 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R129 | 1-216-805-11 | RES-CHIP | 47 5% 1/16W |
| R66 | 1-216-849-11 | RES-CHIP | 220K 5% 1/16W | R130 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R67 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | R131 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R68 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W | R133 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W |
| R69 | 1-216-857-11 | RES-CHIP | 1M 5% 1/16W | R134 | 1-218-683-11 | METAL CHIP | 430 0.5% 1/16W |
| R70 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W | R135 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R71 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R136 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R72 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R137 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R73 | 1-218-686-11 | METAL CHIP | 560 0.5% 1/16W | R138 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R74 | 1-218-684-11 | METAL CHIP | 470 0.5% 1/16W | R139 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|----------|--------------|-------------|---------------|
| R140 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R347 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W |
| R141 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R348 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R142 | 1-216-843-11 | RES-CHIP | 68K 5% 1/16W | | | | |
| R143 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R349 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| | | | | R350 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R144 | 1-216-843-11 | RES-CHIP | 68K 5% 1/16W | R351 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| R145 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R352 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| R146 | 1-218-295-11 | RES-CHIP | 43K 5% 1/16W | R353 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R151 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | | | | |
| R152 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R354 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| | | | | R355 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R153 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R356 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R154 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W | R357 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R155 | 1-216-864-11 | SHORT | 0 | R358 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R301 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | | | | |
| R302 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R359 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| | | | | R360 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R303 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R361 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R304 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R362 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R305 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R363 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R306 | 1-218-696-11 | METAL CHIP | 1.5K 0.5% 1/16W | | | | |
| R307 | 1-218-696-11 | METAL CHIP | 1.5K 0.5% 1/16W | R364 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R365 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R308 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R366 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R309 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R367 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R310 | 1-216-857-11 | RES-CHIP | 1M 5% 1/16W | R368 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R311 | 1-216-840-11 | RES-CHIP | 39K 5% 1/16W | | | | |
| R312 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R369 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| | | | | R370 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R313 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R371 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R314 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R372 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R315 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R373 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R316 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | | | | |
| R317 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R374 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| | | | | R375 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| R318 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R376 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| R319 | 1-216-864-11 | SHORT | 0 | R377 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R320 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R378 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R321 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | | | | |
| R322 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R379 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| | | | | R380 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R323 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R381 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R324 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R382 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R325 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R383 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R326 | 1-216-864-11 | SHORT | 0 | | | | |
| R327 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R384 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R385 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R329 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R386 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R330 | 1-216-828-11 | RES-CHIP | 3.9K 5% 1/16W | R387 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R331 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R388 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R332 | 1-218-700-11 | METAL CHIP | 2.2K 0.5% 1/16W | | | | |
| R333 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R389 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R390 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R334 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R391 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R335 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R392 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R336 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R393 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R337 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W | | | | |
| R338 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W | R394 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R395 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R339 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R396 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R340 | 1-216-828-11 | RES-CHIP | 3.9K 5% 1/16W | R397 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R341 | 1-218-706-11 | METAL CHIP | 3.9K 0.5% 1/16W | R398 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R342 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | | | | |
| R343 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R399 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| | | | | R400 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R344 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R401 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R345 | 1-218-696-11 | METAL CHIP | 1.5K 0.5% 1/16W | R402 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R346 | 1-218-696-11 | METAL CHIP | 1.5K 0.5% 1/16W | R403 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|----------|--------------|-------------|----------------|
| R404 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W | R463 | 1-218-716-11 | METAL CHIP | 10K 0.5% 1/16W |
| R405 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W | R464 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R406 | 1-216-864-11 | SHORT | 0 | R468 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R407 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | | | | |
| R408 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R469 | 1-216-797-11 | RES-CHIP | 10 5% 1/16W |
| | | | | R470 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W |
| R409 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R472 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R410 | 1-218-673-11 | METAL CHIP | 160 0.5% 1/16W | R473 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R411 | 1-218-673-11 | METAL CHIP | 160 0.5% 1/16W | R476 | 1-216-808-11 | RES-CHIP | 82 5% 1/16W |
| R412 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | | | | |
| R413 | 1-218-668-11 | METAL CHIP | 100 0.5% 1/16W | R477 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| | | | | R480 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R414 | 1-218-668-11 | METAL CHIP | 100 0.5% 1/16W | R481 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R415 | 1-218-668-11 | METAL CHIP | 100 0.5% 1/16W | R482 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W |
| R416 | 1-216-857-11 | RES-CHIP | 1M 5% 1/16W | R483 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R417 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | | | | |
| R418 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R484 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R486 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R419 | 1-218-702-11 | METAL CHIP | 2.7K 0.5% 1/16W | R487 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R420 | 1-218-698-11 | METAL CHIP | 1.8K 0.5% 1/16W | R489 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R421 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R490 | 1-216-808-11 | RES-CHIP | 82 5% 1/16W |
| R422 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | | | | |
| R423 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R491 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| | | | | R492 | 1-216-864-11 | SHORT | 0 |
| R424 | 1-218-674-11 | METAL CHIP | 180 0.5% 1/16W | R493 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R425 | 1-218-674-11 | METAL CHIP | 180 0.5% 1/16W | R494 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R426 | 1-218-674-11 | METAL CHIP | 180 0.5% 1/16W | R495 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R427 | 1-218-673-11 | METAL CHIP | 160 0.5% 1/16W | | | | |
| R428 | 1-216-864-11 | SHORT | 0 | R496 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R501 | 1-216-808-11 | RES-CHIP | 82 5% 1/16W |
| R431 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R503 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R432 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R504 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R433 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R505 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R434 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | | | | |
| R435 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R506 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| | | | | R507 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R436 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R508 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R437 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R509 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R438 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R511 | 1-216-847-11 | RES-CHIP | 150K 5% 1/16W |
| R439 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | | | | |
| R440 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R512 | 1-216-864-11 | SHORT | 0 |
| | | | | R514 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R441 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R515 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R442 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R516 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R443 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R517 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R444 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | | | | |
| R445 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R519 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R521 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R446 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R526 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W |
| R447 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R527 | 1-216-864-11 | SHORT | 0 |
| R448 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R538 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R449 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | | | | |
| R450 | 1-216-814-11 | RES-CHIP | 270 5% 1/16W | R540 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R541 | 1-216-831-11 | RES-CHIP | 6.8K 5% 1/16W |
| R451 | 1-216-814-11 | RES-CHIP | 270 5% 1/16W | R542 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R452 | 1-216-814-11 | RES-CHIP | 270 5% 1/16W | R543 | 1-216-826-11 | RES-CHIP | 2.7K 5% 1/16W |
| R453 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | R544 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W |
| R454 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | | | | |
| R455 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | R547 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R550 | 1-216-863-11 | RES-CHIP | 3.3M 5% 1/16W |
| R456 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R551 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R457 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R552 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R458 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | R553 | 1-216-834-11 | RES-CHIP | 12K 5% 1/16W |
| R459 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W | | | | |
| R460 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W | R554 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| | | | | R556 | 1-216-808-11 | RES-CHIP | 82 5% 1/16W |
| R461 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W | R557 | 1-216-808-11 | RES-CHIP | 82 5% 1/16W |
| R462 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R558 | 1-216-808-11 | RES-CHIP | 82 5% 1/16W |

A

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|----------|--------------|-------------|-----------------|
| R559 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R720 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R561 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R721 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W |
| R562 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R722 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R566 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R723 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R567 | 1-218-708-11 | METAL CHIP | 4.7K 0.5% 1/16W | R724 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R568 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R725 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R569 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R728 | 1-216-864-11 | SHORT | 0 |
| R570 | 1-218-716-11 | METAL CHIP | 10K 0.5% 1/16W | R732 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R571 | 1-216-864-11 | SHORT | 0 | R733 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R572 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R735 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R574 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R736 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W |
| R575 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R737 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R576 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R738 | 1-218-708-11 | METAL CHIP | 4.7K 0.5% 1/16W |
| R577 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R740 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R593 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R742 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R596 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | R743 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R597 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R744 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R598 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R745 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R599 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R746 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R602 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | R747 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R603 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R748 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R604 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R749 | 1-216-849-11 | RES-CHIP | 220K 5% 1/16W |
| R605 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R750 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R606 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R751 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R607 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R752 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R608 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R753 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R609 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R754 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R613 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R755 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R614 | 1-216-836-11 | RES-CHIP | 18K 5% 1/16W | R756 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R615 | 1-216-832-11 | RES-CHIP | 8.2K 5% 1/16W | R758 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R616 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R759 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R617 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R760 | 1-216-849-11 | RES-CHIP | 220K 5% 1/16W |
| R618 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R761 | 1-216-849-11 | RES-CHIP | 220K 5% 1/16W |
| R619 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R762 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R620 | 1-216-807-11 | RES-CHIP | 68 5% 1/16W | R763 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| R621 | 1-216-807-11 | RES-CHIP | 68 5% 1/16W | R764 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R622 | 1-216-807-11 | RES-CHIP | 68 5% 1/16W | R765 | 1-216-815-11 | RES-CHIP | 330 5% 1/16W |
| R624 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R766 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R628 | 1-249-377-11 | CARBON | 0.47 5% 1/4W | R767 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R701 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R768 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R702 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | R769 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R703 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R770 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R705 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R771 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R706 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R772 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R707 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R773 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R708 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R774 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R709 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R775 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R710 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R777 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R711 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R778 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R712 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R779 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R714 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R781 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W |
| R715 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R782 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R716 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R783 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R717 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R784 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R718 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R785 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R719 | 1-216-813-11 | RES-CHIP | 220 5% 1/16W | R786 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |

A


| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|----------------------|--------------|----------------------|---------------|
| R787 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R866 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R788 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W | R867 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R790 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | R868 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R796 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R869 | 1-216-834-11 | RES-CHIP | 12K 5% 1/16W |
| R797 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R870 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R803 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R871 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R804 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | R872 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R806 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R873 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R807 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R874 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R808 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R875 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W |
| R809 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R876 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W |
| R810 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R877 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R811 | 1-218-708-11 | METAL CHIP | 4.7K 0.5% 1/16W | R878 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R813 | 1-216-857-11 | RES-CHIP | 1M 5% 1/16W | R879 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R814 | 1-218-701-11 | METAL CHIP | 2.4K 0.5% 1/16W | R880 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R815 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W | R881 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R816 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W | R882 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R817 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W | R883 | 1-216-832-11 | RES-CHIP | 8.2K 5% 1/16W |
| R818 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R884 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R819 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R885 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R820 | 1-216-838-11 | RES-CHIP | 27K 5% 1/16W | R886 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R821 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R887 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R823 | 1-216-835-11 | RES-CHIP | 15K 5% 1/16W | R888 | 1-216-849-11 | RES-CHIP | 220K 5% 1/16W |
| R824 | 1-216-838-11 | RES-CHIP | 27K 5% 1/16W | R889 | 1-216-807-11 | RES-CHIP | 68 5% 1/16W |
| R825 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W | R890 | 1-216-807-11 | RES-CHIP | 68 5% 1/16W |
| R826 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W | R891 | 1-216-807-11 | RES-CHIP | 68 5% 1/16W |
| R828 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R892 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W |
| R829 | 1-216-864-11 | SHORT | 0 | R893 | 1-216-857-11 | RES-CHIP | 1M 5% 1/16W |
| R830 | 1-216-849-11 | RES-CHIP | 220K 5% 1/16W | R895 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W |
| R831 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W | R896 | 1-216-864-11 | SHORT | 0 |
| R832 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | R897 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R833 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W | R898 | 1-216-805-11 | RES-CHIP | 47 5% 1/16W |
| R835 | 1-216-837-11 | RES-CHIP | 22K 5% 1/16W | R899 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R836 | 1-216-864-11 | SHORT | 0 | < NETWORK RESISTOR > | | | |
| R840 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | RB1 | 1-233-576-11 | RES, CHIP NETWORK | 100 |
| R841 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W | RB2 | 1-233-576-11 | RES, CHIP NETWORK | 100 |
| R842 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | RB3 | 1-233-576-11 | RES, CHIP NETWORK | 100 |
| R843 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | RB4 | 1-233-576-11 | RES, CHIP NETWORK | 100 |
| R844 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | RB5 | 1-233-576-11 | RES, CHIP NETWORK | 100 |
| R845 | 1-216-817-11 | RES-CHIP | 470 5% 1/16W | RB6 | 1-233-576-11 | RES, CHIP NETWORK | 100 |
| R848 | 1-216-836-11 | RES-CHIP | 18K 5% 1/16W | < TUNER > | | | |
| R849 | 1-216-836-11 | RES-CHIP | 18K 5% 1/16W | TU1 | 8-598-430-50 | TUNER, FSS BTF-FA401 | |
| R850 | 1-216-830-11 | RES-CHIP | 5.6K 5% 1/16W | TU2 | 8-598-542-20 | TUNER, FSS BTF-WA412 | |
| R851 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | < VIBRATOR > | | | |
| R852 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | X1 | 1-577-110-11 | VIBRATOR, CRYSTAL | |
| R854 | 1-216-838-11 | RES-CHIP | 27K 5% 1/16W | X301 | 1-567-505-11 | OSCILLATOR, CRYSTAL | |
| R855 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W | X302 | 1-767-179-31 | VIBRATOR, SERAMIC | |
| R856 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | X303 | 1-567-505-11 | OSCILLATOR, CRYSTAL | |
| R857 | 1-216-838-11 | RES-CHIP | 27K 5% 1/16W | X304 | 1-767-179-31 | VIBRATOR, SERAMIC | |
| R858 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | X305 | 1-781-282-11 | VIBRATOR, CERAMIC | |
| R859 | 1-218-708-11 | METAL CHIP | 4.7K 0.5% 1/16W | X306 | 1-767-989-11 | VIBRATOR, CERAMIC | |
| R860 | 1-249-389-11 | CARBON | 4.7 5% 1/4W | X307 | 1-760-895-21 | VIBRATOR, CERAMIC | |
| R861 | 1-249-389-11 | CARBON | 4.7 5% 1/4W | X701 | 1-579-358-21 | VIBLATOR, CRYSTAL | |
| R862 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W | ***** | | | |
| R863 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | | | | |
| R864 | 1-216-839-11 | RES-CHIP | 33K 5% 1/16W | | | | |
| R865 | 1-218-708-11 | METAL CHIP | 4.7K 0.5% 1/16W | | | | |


D

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--|--------------|--------------|-----------------|----------|--------------|--------------|-------------------|
| * A-1348-038-A D BOARD, COMPLETE ***** 3-710-578-01 COVER, VOLUME, 6 MOLD 4-382-854-11 SCREW (M3X10), P, SW (+) 7-682-952-09 SCREW +PSW 3X16 | | | | | | | |
| < CAPACITOR > | | | | | | | |
| C8001 | 1-137-372-11 | MYLAR | 0.022UF 5% 50V | C8065 | 1-106-383-00 | MYLAR | 0.047UF 10% 200V |
| C8002 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | C8066 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C8003 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | C8067 | 1-104-665-11 | ELECT | 100UF 20% 25V |
| C8004 | 1-104-666-11 | ELECT | 220UF 20% 25V | C8068 | 1-102-038-00 | CERAMIC | 0.001UF 500V |
| C8005 | 1-126-942-61 | ELECT | 1000UF 20% 25V | C8069 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C8006 | 1-126-942-61 | ELECT | 1000UF 20% 25V | C8070 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8007 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | C8071 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8008 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | C8072 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8009 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V | C8073 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C8010 | 1-136-177-00 | FILM | 1UF 5% 50V | C8074 | 1-104-665-11 | ELECT | 100UF 20% 25V |
| C8011 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | C8075 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C8012 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V | C8076 | 1-128-551-11 | ELECT | 22UF 20% 25V |
| C8013 | 1-162-927-11 | CERAMIC CHIP | 100PF 5% 50V | C8077 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C8014 | 1-104-665-11 | ELECT | 100UF 20% 25V | C8078 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V |
| C8015 | 1-126-969-11 | ELECT | 220UF 20% 50V | C8079 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8016 | 1-104-665-11 | ELECT | 100UF 20% 25V | C8080 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8017 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V | C8081 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V |
| C8018 | 1-126-964-11 | ELECT | 10UF 20% 50V | C8082 | 1-165-176-11 | CERAMIC CHIP | 0.047UF 10% 16V |
| C8023 | 1-106-220-00 | MYLAR | 0.1UF 10% 100V | C8083 | 1-130-495-00 | MYLAR | 0.1UF 5% 50V |
| C8024 | 1-137-372-11 | MYLAR | 0.022UF 5% 50V | C8084 | 1-130-992-11 | FILM | 0.022UF 5% 50V |
| C8025 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8085 | 1-162-924-11 | CERAMIC CHIP | 56PF 5% 50V |
| C8026 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8086 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C8028 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8087 | 1-126-960-11 | ELECT | 1UF 20% 50V |
| C8029 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8088 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8031 | 1-107-636-11 | ELECT | 10UF 20% 160V | C8089 | 1-107-444-11 | CERAMIC | 100PF 10% 2KV |
| C8032 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8090 | 1-126-960-11 | ELECT | 1UF 20% 50V |
| C8033 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8091 | 1-104-665-11 | ELECT | 100UF 20% 25V |
| C8036 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8092 | 1-117-640-11 | FILM | 6800PF 3% 1.2KV |
| C8037 | 1-126-968-11 | ELECT | 100UF 20% 50V | C8093 | 1-107-648-91 | ELECT | 100UF 20% 160V |
| C8040 | 1-115-349-51 | CERAMIC | 0.01UF 2KV | C8094 | 1-104-665-11 | ELECT | 100UF 20% 25V |
| C8045 | 1-126-965-11 | ELECT | 22UF 20% 50V | C8095 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V |
| C8046 | 1-126-965-11 | ELECT | 22UF 20% 50V | C8096 | 1-136-684-51 | MYLAR | 0.0022UF 10% 100V |
| C8047 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C8097 | 1-162-131-11 | CERAMIC | 220PF 10% 2KV |
| C8048 | 1-126-965-11 | ELECT | 22UF 20% 50V | C8098 | 1-162-131-11 | CERAMIC | 220PF 10% 2KV |
| C8049 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C8099 | 1-115-416-11 | CERAMIC CHIP | 0.001UF 5% 25V |
| C8050 | 1-126-965-11 | ELECT | 22UF 20% 50V | C8100 | 1-126-961-11 | ELECT | 2.2UF 20% 50V |
| C8051 | 1-102-038-00 | CERAMIC | 0.001UF 500V | C8102 | 1-102-038-00 | CERAMIC | 0.001UF 500V |
| C8052 | 1-126-965-11 | ELECT | 22UF 20% 50V | C8103 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8053 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C8104 | 1-162-965-11 | CERAMIC CHIP | 0.0015UF 10% 50V |
| C8054 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | C8105 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C8055 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V | C8106 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| C8056 | 1-107-652-11 | ELECT | 10UF 20% 250V | C8107 | 1-136-187-11 | MYLAR | 0.047UF 10% 250V |
| C8057 | 1-126-959-11 | ELECT | 0.47UF 20% 50V | C8108 | 1-126-964-11 | ELECT | 10UF 20% 50V |
| C8058 | 1-164-230-11 | CERAMIC CHIP | 220PF 5% 50V | C8109 | 1-162-924-11 | CERAMIC CHIP | 56PF 5% 50V |
| C8059 | 1-127-715-91 | CERAMIC CHIP | 0.22UF 10% 16V | C8110 | 1-126-960-11 | ELECT | 1UF 20% 50V |
| C8060 | 1-104-665-11 | ELECT | 100UF 20% 25V | C8111 | 1-126-960-11 | ELECT | 1UF 20% 50V |
| C8061 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C8112 | 1-164-315-11 | CERAMIC CHIP | 470PF 5% 50V |
| C8062 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V | C8113 | 1-130-495-00 | MYLAR | 0.1UF 5% 50V |
| C8063 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | C8114 | 1-125-473-11 | ELECT(BLOCK) | 1000UF 20% 160V |
| C8064 | 1-107-636-11 | ELECT | 10UF 20% 160V | C8115 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| | | | | C8116 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| | | | | C8117 | 1-102-038-00 | CERAMIC | 0.001UF 500V |
| | | | | C8118 | 1-136-189-00 | MYLAR | 0.1UF 10% 250V |
| | | | | C8119 | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25 |
| | | | | C8120 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V |
| | | | | C8121 | 1-115-349-51 | CERAMIC | 0.01UF 2KV |
| | | | | C8122 | 1-126-934-11 | ELECT | 220UF 20% 16V |

D

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---------------|--------------|-------------------------------|-------------------|------------------|--------------|-----------------|--------|
| C8123 | 1-107-444-11 | CERAMIC | 100PF 10% 2KV | D8013 | 8-719-921-88 | RD5.1ESB2 | |
| C8124 | 1-117-642-11 | FILM | 8200PF 3% 1.2KV | D8014 | 8-719-921-88 | RD5.1ESB2 | |
| C8125 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | D8015 | 8-719-991-33 | 1SS133T-77 | |
| C8126 | 1-106-357-00 | MYLAR | 0.0039UF 99% 200V | D8016 | 8-719-991-33 | 1SS133T-77 | |
| C8127 | 1-126-942-61 | ELECT | 1000UF 20% 25V | D8019 | 8-719-991-33 | 1SS133T-77 | |
| C8129 | 1-137-150-11 | MYLAR | 0.01UF 5% 50V | D8020 | 8-719-991-33 | 1SS133T-77 | |
| C8131 | 1-128-582-11 | ELECT | 10UF 20% 100V | D8021 | 8-719-061-21 | FMQ-G5FMS | |
| C8132 | 1-126-942-61 | ELECT | 1000UF 20% 25V | D8022 | 8-719-991-33 | 1SS133T-77 | |
| C8133 | 1-107-649-11 | ELECT | 2.2UF 20% 250V | D8023 | 8-719-991-33 | 1SS133T-77 | |
| C8135 | 1-109-961-11 | FILM | 0.75UF 5% 250V | D8024 | 8-719-921-88 | RD15ES-B2 | |
| C8136 | 1-130-495-00 | MYLAR | 0.1UF 5% 50V | D8025 | 8-719-991-33 | 1SS133T-77 | |
| C8137 | 1-126-942-61 | ELECT | 1000UF 20% 25V | D8026 | 8-719-10*-89 | RD5.6ESB2 | |
| C8138 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V | D8027 | 8-719-028-45 | D2L20U | |
| C8139 | 1-126-964-11 | ELECT | 10UF 20% 50V | D8028 | 8-719-921-88 | RD15ES-B2 | |
| C8142 | 1-117-664-11 | FILM | 0.27UF 5% 250V | D8029 | 8-719-028-45 | D2L20U | |
| C8143 | 1-126-960-11 | ELECT | 1UF 20% 50V | D8030 | 8-719-028-45 | D2L20U | |
| C8148 | 1-104-665-11 | ELECT | 100UF 20% 25V | D8031 | 8-719-921-88 | RD18ES-B2 | |
| C8150 | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10% 16V | D8032 | 8-719-302-43 | EL1Z | |
| C8153 | 1-126-960-11 | ELECT | 1UF 20% 50V | D8033 | 8-719-028-72 | RGP02-17EL-6433 | |
| < CONNECTOR > | | | | D8034 | 6-500-004-01 | DIODE ERD07-15L | |
| CN8002* | 1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | | D8035 | 6-500-004-01 | DIODE ERD07-15L | |
| CN8003* | 1-691-135-11 | PIN, CONNECTOR (PC BOARD) 4P | | D8036 | 8-719-921-88 | RD15ES-B2 | |
| CN8004* | 1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | | D8037 | 8-719-028-45 | D2L20U | |
| CN8005* | 1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | | D8038 | 8-719-302-43 | EL1Z | |
| CN8006* | 1-779-890-11 | CONNECTOR, BOARD TO BOARD 10P | | D8039 | 8-719-028-72 | RGP02-17EL-6433 | |
| CN8007* | 1-564-506-11 | PLUG, CONNECTOR 3P | | D8043 | 8-719-991-33 | 1SS133T-77 | |
| CN8008* | 1-564-506-11 | PLUG, CONNECTOR 3P | | D8045 | 8-719-908-03 | GP08D | |
| CN8009* | 1-564-506-11 | PLUG, CONNECTOR 3P | | D8046 | 8-719-991-33 | 1SS133T-77 | |
| CN8010* | 1-564-507-11 | PLUG, CONNECTOR 4P | | D8047 | 8-719-991-33 | 1SS133T-77 | |
| CN8011* | 1-564-507-11 | PLUG, CONNECTOR 4P | | < FERRITE BEAD > | | | |
| CN8012* | 1-564-507-11 | PLUG, CONNECTOR 4P | | FB8001 | 1-410-397-21 | FERRITE | 1.1UH |
| CN8013* | 1-766-177-11 | PIN, CONNECTOR (PC BOARD) 9P | | FB8002 | 1-410-397-21 | FERRITE | 1.1UH |
| CN8015* | 1-506-371-00 | PIN, CONNECTOR 2P | | FB8003 | 1-414-229-11 | FERRITE | 0UH |
| CN8016* | 1-564-507-11 | PLUG, CONNECTOR 4P | | FB8004 | 1-216-864-11 | SHORT | 0 |
| CN8018* | 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | FB8005 | 1-469-869-21 | FERRITE | 0UH |
| CN8019* | 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | FB8006 | 1-469-869-21 | FERRITE | 0UH |
| CN8020* | 1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | FB8008 | 1-410-396-41 | FERRITE | 0.45UH |
| CN8021* | 1-506-371-00 | PIN, CONNECTOR 2P | | FB8009 | 1-410-396-41 | FERRITE | 0.45UH |
| CN8022* | 1-564-510-11 | PLUG, CONNECTOR 7P | | FB8010 | 1-410-396-41 | FERRITE | 0.45UH |
| CN8023* | 1-564-507-11 | PLUG, CONNECTOR 4P | | FB8011 | 1-410-396-41 | FERRITE | 0.45UH |
| < DIODE > | | | | FB8014 | 1-469-869-21 | FERRITE | 0UH |
| D8001 | 8-719-109-98 | RD5.6ESB2 | | FB8015 | 1-469-869-21 | FERRITE | 0UH |
| D8002 | 8-719-110-53 | RD20ES-B2 | | FB8016 | 1-469-869-21 | FERRITE | 0UH |
| D8003 | 8-719-924-13 | MTZJ-T-77-22B | | FB8017 | 1-469-869-21 | FERRITE | 0UH |
| D8004 | 8-719-908-03 | GP08D | | FB8018 | 1-469-869-21 | FERRITE | 0UH |
| D8005 | 8-719-991-33 | 1SS133T-77 | | FB8019 | 1-410-397-21 | FERRITE | 1.1UH |
| D8006 | 8-719-991-33 | 1SS133T-77 | | FB8020 | 1-414-229-11 | FERRITE | 0UH |
| D8007 | 8-719-991-33 | 1SS133T-77 | | FB8021 | 1-410-397-21 | FERRITE | 1.1UH |
| D8008 | 8-719-991-33 | 1SS133T-77 | | FB8022 | 1-410-396-41 | FERRITE | 0.45UH |
| D8009 | 8-719-991-33 | 1SS133T-77 | | FB8023 | 1-410-396-41 | FERRITE | 0.45UH |
| D8010 | 8-719-991-33 | 1SS133T-77 | | FB8024 | 1-469-869-21 | FERRITE | 0UH |
| < IC > | | | | < IC > | | | |
| D8011 | 8-719-991-33 | 1SS133T-77 | | IC8001 | 8-749-019-08 | IC STK392-560 | |
| D8012 | 8-719-991-33 | 1SS133T-77 | | IC8002 | 8-749-019-08 | IC STK392-560 | |

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

D

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------------|--------------|----------------------------|--------|
| IC8003 | 8-759-593-33 | LA78045 | |
| IC8004 | 8-759-077-91 | NJM78L12A | |
| IC8005 | 8-759-585-82 | BA9759F-E2 | |
| IC8006 | 8-759-700-07 | NJM2903M | |
| IC8007 | 8-759-700-07 | NJM2903M | |
| IC8008 | 8-759-585-82 | BA9759F-E2 | |
| IC8009 | 8-759-803-42 | LA6500-FA | |
| IC8012 | 8-759-701-01 | NJM2904M | |
| < COIL > | | | |
| L8001 | 1-412-533-21 | INDUCTOR 47UH | |
| L8002 | 1-412-533-21 | INDUCTOR 47UH | |
| L8003 | 1-412-525-31 | INDUCTOR 10UH | |
| L8004 | 1-412-533-21 | INDUCTOR 47UH | |
| L8005 | 1-412-533-21 | INDUCTOR 47UH | |
| L8006 | 1-412-525-31 | INDUCTOR 10UH | |
| L8007 | 1-412-533-21 | INDUCTOR 47UH | |
| L8008 | 1-412-533-21 | INDUCTOR 47UH | |
| L8009 | 1-412-525-31 | INDUCTOR 10UH | |
| L8010 | 1-414-187-11 | INDUCTOR 47UH | |
| L8011 | 1-412-525-31 | INDUCTOR 10UH | |
| L8012 | 1-414-187-11 | INDUCTOR 47UH | |
| L8013 | 1-414-856-11 | INDUCTOR 10UH | |
| L8014 | 1-414-189-31 | INDUCTOR 100UH | |
| L8015 | 1-414-189-31 | INDUCTOR 100UH | |
| L8016 | 1-412-537-31 | INDUCTOR 100UH | |
| L8017 | 1-414-856-11 | INDUCTOR 10UH | |
| L8018 | 1-406-663-21 | INDUCTOR 47UH | |
| L8019 | 1-419-352-11 | COIL, HORIZONTAL LINEARITY | |
| L8020 | 1-412-525-31 | INDUCTOR 10UH | |
| L8021 | 1-406-659-11 | INDUCTOR 10UH | |
| L8022 | 1-412-552-11 | INDUCTOR 2.2mmH | |
| L8023 | 1-414-856-11 | INDUCTOR 10UH | |
| L8024 | 1-414-856-11 | INDUCTOR 10UH | |
| L8025 | 1-414-856-11 | INDUCTOR 10UH | |
| L8026 | 1-414-856-11 | INDUCTOR 10UH | |
| < NEON LAMP > | | | |
| NL8001 | 1-517-778-21 | LAMP, NEON | |
| < IC LINK > | | | |
| PS8001 | 1-533-595-31 | LINK, IC | |
| PS8002 | 1-533-595-31 | LINK, IC | |
| PS8003 | 1-533-595-31 | LINK, IC | |
| PS8004 | 1-533-595-31 | LINK, IC | |
| PS8005 | 1-533-595-31 | LINK, IC | |
| PS8006 | 1-533-595-31 | LINK, IC | |
| PS8007 | 1-533-595-31 | LINK, IC | |
| < TRANSISTOR > | | | |
| Q8001 | 8-729-422-27 | 2SD601A-Q | |
| Q8002 | 8-729-046-80 | 2SC4634LS-CB11 | |
| Q8003 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8004 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8005 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8007 | 8-729-046-80 | 2SC4634LS-CB11 | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|--------------|----------------------------|--------|
| Q8008 | 8-729-207-89 | 2SA1358-Y | |
| Q8009 | 8-729-207-82 | 2SC3421-Y | |
| Q8010 | 8-729-422-27 | 2SD601A-Q | |
| Q8011 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8014 | 8-729-422-27 | 2SD601A-Q | |
| Q8015 | 8-729-422-27 | 2SD601A-Q | |
| Q8016 | 8-729-422-27 | 2SD601A-Q | |
| Q8019 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8020 | 8-729-422-27 | 2SD601A-Q | |
| Q8021 | 8-729-422-27 | 2SD601A-Q | |
| Q8022 | 8-729-422-27 | 2SD601A-Q | |
| Q8023 | 8-729-048-47 | 2SC2688(5)-LK | |
| Q8024 | 8-729-056-50 | TRANSISTOR 2SC5681-YB | |
| Q8027 | 8-729-050-13 | 2SJ585LS-CC11 | |
| Q8028 | 8-729-422-27 | 2SD601A-Q | |
| Q8029 | 8-729-422-27 | 2SD601A-Q | |
| Q8030 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8031 | 8-729-422-27 | 2SD601A-Q | |
| Q8032 | 8-729-422-27 | 2SD601A-Q | |
| Q8035 | 8-729-050-13 | 2SJ585LS-CC11 | |
| Q8036 | 8-729-026-49 | 2SA1037AK-T146-R | |
| Q8037 | 8-729-422-27 | 2SD601A-Q | |
| Q8038 | 8-729-038-10 | TRANSISTOR 1MB12-140-F153A | |
| Q8039 | 8-729-048-47 | 2SC2688(5)-LK | |
| Q8101 | 8-729-026-49 | 2SA1037AK-T146-R | |
| < RESISTOR > | | | |
| R8001 | 1-216-825-11 | RES-CHIP 2.2K 5% 1/16W | |
| R8002 | 1-216-809-11 | RES-CHIP 100 5% 1/16W | |
| R8003 | 1-216-809-11 | RES-CHIP 100 5% 1/16W | |
| R8004 | 1-216-809-11 | RES-CHIP 100 5% 1/16W | |
| R8005 | 1-215-875-11 | METAL OXIDE 10K 5% 1W | |
| R8007 | 1-216-809-11 | RES-CHIP 100 5% 1/16W | |
| R8008 | 1-216-809-11 | RES-CHIP 100 5% 1/16W | |
| R8009 | 1-216-809-11 | RES-CHIP 100 5% 1/16W | |
| R8010 | 1-260-131-11 | CARBON 470K 5% 1/2W | |
| R8011 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8012 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8013 | 1-218-710-11 | METAL CHIP 5.6K 0.5% 1/16W | |
| R8014 | 1-218-709-11 | METAL CHIP 5.1K 0.5% 1/16W | |
| R8015 | 1-216-837-11 | RES-CHIP 22K 5% 1/16W | |
| R8016 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8017 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8018 | 1-216-821-11 | RES-CHIP 1K 5% 1/16W | |
| R8019 | 1-218-712-11 | METAL CHIP 6.8K 0.5% 1/16W | |
| R8020 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8021 | 1-216-833-11 | RES-CHIP 10K 5% 1/16W | |
| R8022 | 1-216-839-11 | RES-CHIP 33K 5% 1/16W | |
| R8023 | 1-216-833-11 | RES-CHIP 10K 5% 1/16W | |
| R8024 | 1-216-833-11 | RES-CHIP 10K 5% 1/16W | |
| R8025 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8026 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8029 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8030 | 1-215-903-11 | METAL OXIDE 68K 5% 2W | |
| R8031 | 1-216-829-11 | RES-CHIP 4.7K 5% 1/16W | |
| R8032 | 1-216-821-11 | RES-CHIP 1K 5% 1/16W | |
| R8033 | 1-216-833-11 | RES-CHIP 10K 5% 1/16W | |

D

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|----------|--------------|-------------|-----------------|
| R8034 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R8095 | 1-216-801-11 | RES-CHIP | 22 5% 1/16W |
| R8035 | 1-218-694-11 | METAL CHIP | 1.2K 0.5% 1/16W | R8096 | 1-216-801-11 | RES-CHIP | 22 5% 1/16W |
| R8036 | 1-214-800-11 | METAL | 2.2 1% 1/2W | R8097 | 1-214-808-11 | METAL | 4.7 1% 1/2W |
| R8037 | 1-215-903-11 | METAL OXIDE | 68K 5% 2W | | | | |
| R8038 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R8098 | 1-214-808-11 | METAL | 4.7 1% 1/2W |
| | | | | R8099 | 1-218-740-11 | METAL CHIP | 100K 0.5% 1/16W |
| R8039 | 1-214-800-11 | METAL | 2.2 1% 1/2W | R8100 | 1-216-475-11 | METAL OXIDE | 120 5% 3W |
| R8040 | 1-215-913-11 | METAL OXIDE | 220 5% 3W | R8101 | 1-216-475-11 | METAL OXIDE | 120 5% 3W |
| R8041 | 1-218-709-11 | METAL CHIP | 5.1K 0.5% 1/16W | R8102 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8042 | 1-216-826-11 | RES-CHIP | 2.7K 5% 1/16W | | | | |
| R8043 | 1-218-708-11 | METAL CHIP | 4.7K 0.5% 1/16W | R8103 | 1-216-816-11 | RES-CHIP | 390 5% 1/16W |
| | | | | R8104 | 1-216-832-11 | RES-CHIP | 8.2K 5% 1/16W |
| R8044 | 1-218-712-11 | METAL CHIP | 6.8K 0.5% 1/16W | R8105 | 1-214-808-11 | METAL | 4.7 1% 1/2W |
| R8045 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8106 | 1-214-808-11 | METAL | 4.7 1% 1/2W |
| R8046 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8107 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8047 | 1-215-857-71 | METAL OXIDE | 10 5% 1W | | | | |
| R8048 | 1-414-189-31 | INDUCTOR | 100UH | R8108 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| | | | | R8109 | 1-216-814-11 | RES-CHIP | 270 5% 1/16W |
| R8049 | 1-414-189-31 | INDUCTOR | 100UH | R8110 | 1-249-427-11 | CARBON | 6.8K 5% 1/4W |
| R8050 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R8111 | 1-216-819-11 | RES-CHIP | 680 5% 1/16W |
| R8051 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8112 | 1-216-824-11 | RES-CHIP | 1.8K 5% 1/16W |
| R8053 | 1-214-808-11 | METAL | 4.7 1% 1/2W | | | | |
| R8055 | 1-218-748-11 | METAL CHIP | 220K 0.5% 1/16W | R8113 | 1-216-475-11 | METAL OXIDE | 120 5% 3W |
| | | | | R8114 | 1-216-475-11 | METAL OXIDE | 120 5% 3W |
| R8056 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R8115 | 1-216-475-11 | METAL OXIDE | 120 5% 3W |
| R8057 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R8116 | 1-216-475-11 | METAL OXIDE | 120 5% 3W |
| R8058 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R8117 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8059 | 1-214-808-11 | METAL | 4.7 1% 1/2W | | | | |
| R8060 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8118 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| | | | | R8119 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8061 | 1-216-390-11 | METAL OXIDE | 1.2 5% 3W | R8120 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8062 | 1-260-107-11 | CARBON | 4.7K 5% 1/2W | R8121 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R8063 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8123 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W |
| R8064 | 1-214-808-11 | METAL | 4.7 1% 1/2W | | | | |
| R8065 | 1-260-328-11 | CARBON | 1K 5% 1/2W | R8124 | 1-249-377-11 | CARBON | 0.47 5% 1/4W |
| | | | | R8125 | 1-216-816-11 | RES-CHIP | 390 5% 1/16W |
| R8066 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8126 | 1-216-823-11 | RES-CHIP | 1.5K 5% 1/16W |
| R8067 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8128 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8068 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | R8129 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| R8069 | 1-214-808-11 | METAL | 4.7 1% 1/2W | | | | |
| R8070 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8130 | 1-216-825-11 | RES-CHIP | 2.2K 5% 1/16W |
| | | | | R8131 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8071 | 1-215-381-00 | METAL | 22 1% 1/4W | R8132 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8073 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8133 | 1-216-487-11 | METAL OXIDE | 12K 5% 3W |
| R8075 | 1-214-808-11 | METAL | 4.7 1% 1/2W | | | | |
| R8076 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R8134 | 1-215-873-00 | METAL OXIDE | 4.7K 5% 1W |
| R8077 | 1-216-829-11 | RES-CHIP | 4.7K 5% 1/16W | R8135 | 1-216-487-11 | METAL OXIDE | 12K 5% 3W |
| | | | | R8136 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8078 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8137 | 1-218-740-11 | METAL CHIP | 100K 0.5% 1/16W |
| R8079 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8138 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8080 | 1-216-353-00 | METAL OXIDE | 2.2 5% 1W | | | | |
| R8081 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8139 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W |
| R8082 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8140 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| | | | | R8141 | 1-216-827-11 | RES-CHIP | 3.3K 5% 1/16W |
| R8083 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | R8142 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W |
| R8084 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | R8143 | 1-218-734-11 | METAL CHIP | 56K 0.5% 1/16W |
| R8085 | 1-214-808-11 | METAL | 4.7 1% 1/2W | | | | |
| R8086 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8144 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W |
| R8087 | 1-249-385-11 | CARBON | 2.2 5% 1/4W | R8145 | 1-218-716-11 | METAL CHIP | 10K 0.5% 1/16W |
| | | | | R8146 | 1-218-716-11 | METAL CHIP | 10K 0.5% 1/16W |
| R8088 | 1-249-385-11 | CARBON | 2.2 5% 1/4W | R8147 | 1-218-710-11 | METAL CHIP | 5.6K 0.5% 1/16W |
| R8089 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8148 | 1-216-845-11 | RES-CHIP | 100K 5% 1/16W |
| R8090 | 1-214-808-11 | METAL | 4.7 1% 1/2W | | | | |
| R8091 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8149 | 1-215-905-11 | METAL OXIDE | 10 5% 3W |
| R8092 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8150 | 1-218-740-11 | METAL CHIP | 100K 0.5% 1/16W |
| | | | | R8151 | 1-218-692-11 | METAL CHIP | 1K 0.5% 1/16W |
| R8093 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8152 | 1-218-716-11 | METAL CHIP | 10K 0.5% 1/16W |
| R8094 | 1-214-808-11 | METAL | 4.7 1% 1/2W | R8153 | 1-218-692-11 | METAL CHIP | 1K 0.5% 1/16W |

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

- The components identified by \blacktriangle in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

D **G**

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|-----------------|--|--------------|----------------------------|--------|
| R8154 | 1-218-728-11 | METAL CHIP | 33K 0.5% 1/16W | R8228 | 1-260-314-11 | CARBON 68 5% 1/2W | |
| R8155 | 1-215-469-00 | METAL | 100K 1% 1/4W | R8230 | 1-218-751-11 | METAL CHIP 300K 0.5% 1/16W | |
| R8156 | 1-215-469-00 | METAL | 100K 1% 1/4W | < TRANSFORMER > | | | |
| R8157 | 1-218-738-11 | METAL CHIP | 82K 0.5% 1/16W | T8001 | 1-435-142-11 | TRANSFORMER, FERRITE (DFT) | |
| R8159 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | T8002 | 1-437-400-11 | TRANSFORMER, FERRITE (HDT) | |
| R8160 | 1-249-393-11 | CARBON | 10 5% 1/4W | T8003 | 1-437-401-11 | TRANSFORMER, FERRITE (HOT) | |
| R8161 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | T8004 Δ | 1-437-399-11 | TRANSFORMER, FERRITE (LOT) | |
| R8163 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | T8005 Δ | 1-453-285-21 | FBT ASSY, NX-4006/X4P4 | |
| R8164 | 1-218-734-11 | METAL CHIP | 56K 0.5% 1/16W | < THERMISTOR > | | | |
| R8165 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | TH8001 | 1-800-193-00 | THERMISTOR | |
| R8167 | 1-414-189-31 | INDUCTOR | 100UH | < VARIABLE RESISTOR > | | | |
| R8166 | 1-218-716-11 | METAL CHIP | 10K 0.5% 1/16W | \blacktriangle VR8001 Δ 1-225-628-9 1RES, VAR, ADJ, CERME 5K \blacktriangle VR8002 Δ 1-225-632-91 RES, VAR, ADJ, CERMET 100K ***** | | | |
| R8168 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | * A-1316-566-A G BOARD, COMPLETE | | | |
| R8169 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | ***** | | | |
| R8170 | 1-218-716-11 | METAL CHIP | 10K 0.5% 1/16W | 1-533-223-11 HOLDER, FUSE | | | |
| R8171 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | * 4-374-846-01 COVER, CAPACITOR, CAP TYPE | | | |
| R8172 | 1-249-405-11 | CARBON | 100 5% 1/4W | 4-382-854-11 SCREW (M3X10), P, SW (+) | | | |
| R8173 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | < CAPACITOR > | | | |
| R8174 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | C5001 | 1-164-645-11 | CERAMIC 1000PF 10% 500V | |
| R8176 | 1-218-740-11 | METAL CHIP | 100K 0.5% 1/16W | C5002 | 1-164-645-11 | CERAMIC 1000PF 10% 500V | |
| R8178 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | C5006 | 1-104-665-11 | ELECT 100UF 20% 25V | |
| R8179 | 1-414-189-31 | INDUCTOR | 100UH | C5007 | 1-164-645-11 | CERAMIC 1000PF 10% 500V | |
| R8180 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | C5008 | 1-164-645-11 | CERAMIC 1000PF 10% 500V | |
| R8181 | 1-216-841-11 | RES-CHIP | 47K 5% 1/16W | C5009 | 1-126-953-11 | ELECT 2200UF 20% 35V | |
| R8182 | 1-218-748-11 | RES-CHIP | 220K 5% 1/16W | C5010 | 1-126-953-11 | ELECT 2200UF 20% 35V | |
| R8183 | 1-218-748-11 | RES-CHIP | 220K 5% 1/16W | C5011 | 1-164-645-11 | CERAMIC 1000PF 10% 500V | |
| R8184 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | C5012 | 1-164-645-11 | CERAMIC 1000PF 10% 500V | |
| R8187 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | C5015 | 1-115-758-11 | ELECT 470UF 20% 16V | |
| R8189 | 1-249-377-11 | CARBON | 0.47 5% 1/4W | C5016 | 1-126-942-61 | ELECT 1000UF 20% 25V | |
| R8190 | 1-215-431-00 | METAL | 2.7K 1% 1/4W | C5017 | 1-126-942-61 | ELECT 1000UF 20% 25V | |
| R8191 | 1-215-429-00 | METAL | 2.2K 1% 1/4W | C5018 | 1-126-952-11 | ELECT 1000UF 20% 35V | |
| R8192 | 1-215-449-00 | METAL | 15K 1% 1/4W | C5019 | 1-126-952-11 | ELECT 1000UF 20% 35V | |
| R8193 | 1-215-449-00 | METAL | 15K 1% 1/4W | C5020 | 1-110-626-11 | ELECT 330UF 20% 160V | |
| R8194 | 1-215-449-00 | METAL | 15K 1% 1/4W | C5021 | 1-115-771-51 | ELECT 0.0047F 20% 16V | |
| R8195 | 1-215-449-00 | METAL | 15K 1% 1/4W | C5022 | 1-126-947-11 | ELECT 47UF 20% 25V | |
| R8196 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | C5024 | 1-126-947-11 | ELECT 47UF 20% 25V | |
| R8197 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | C5025 | 1-126-947-11 | ELECT 47UF 20% 25V | |
| R8198 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | C5026 | 1-126-947-11 | ELECT 47UF 20% 25V | |
| R8201 | 1-249-397-11 | CARBON | 22 5% 1/4W | C5027 | 1-126-951-11 | ELECT 470UF 20% 35V | |
| R8202 | 1-260-092-11 | CARBON | 270 5% 1/2W | C5028 | 1-126-951-11 | ELECT 470UF 20% 35V | |
| R8203 | 1-249-377-11 | CARBON | 0.47 5% 1/4W | C5029 | 1-107-639-11 | ELECT 47UF 20% 160V | |
| R8205 | 1-249-377-11 | CARBON | 0.47 5% 1/4W | C5030 | 1-126-947-11 | ELECT 47UF 20% 25V | |
| R8206 | 1-249-377-11 | CARBON | 0.47 5% 1/4W | C5031 | 1-126-768-11 | ELECT 2200UF 20% 16V | |
| R8208 | 1-260-288-11 | CARBON | 0.47 5% 1/2W | C5038 | 1-126-947-11 | ELECT 47UF 20% 25V | |
| R8209 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | C5039 | 1-126-947-11 | ELECT 47UF 20% 25V | |
| R8210 | 1-216-809-11 | RES-CHIP | 100 5% 1/16W | C5040 | 1-107-826-11 | CERAMIC CHIP 0.1UF 10% 16V | |
| R8211 | 1-215-906-11 | METAL OXIDE | 15 5% 3W | C5041 | 1-126-767-11 | ELECT 1000UF 20% 16V | |
| R8212 | 1-215-907-11 | METAL OXIDE | 22 5% 3W | C5042 | 1-126-963-11 | ELECT 4.7UF 20% 50V | |
| R8213 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | C5043 | 1-126-935-11 | ELECT 470UF 20% 16V | |
| R8216 | 1-216-833-11 | RES-CHIP | 10K 5% 1/16W | | | | |
| R8217 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | | | | |
| R8218 | 1-260-123-11 | CARBON | 100K 5% 1/2W | | | | |
| R8219 | 1-249-377-11 | CARBON | 0.47 5% 1/4W | | | | |
| R8220 | 1-216-821-11 | RES-CHIP | 1K 5% 1/16W | | | | |
| R8223 | 1-218-748-11 | METAL CHIP | 220K 0.5% 1/16W | | | | |
| R8224 | 1-260-127-11 | CARBON | 220K 5% 1/2W | | | | |
| R8225 | 1-260-292-11 | CARBON | 1 5% 1/2W | | | | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------------|--------------|------------------------------|-----------------|----------------------------------|--------------|----------------|--------|
| C5047 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 16V | D5013 | 8-719-069-56 | UDZSTE-176.2B | |
| C5049 | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10% 25V | D5014 | 8-719-404-50 | MA111-TX | |
| C5050 | 1-128-554-11 | ELECT | 330UF 20% 63V | D5015 | 8-719-404-50 | MA111-TX | |
| C5051 | 1-126-961-11 | ELECT | 2.2UF 20% 50V | | | | |
| C5053 | 1-126-967-11 | ELECT | 47UF 20% 50V | D5016 | 8-719-083-44 | DIODE FSQ05A04 | |
| C5054 | 1-126-955-11 | ELECT | 4700UF 20% 35V | D5017 | 8-719-073-25 | S1VBA20 | |
| C5055 | 1-126-933-11 | ELECT | 100UF 20% 16V | D5018 | 8-719-056-84 | UDZ-TE-17-7.5B | |
| C6001 | 1-126-967-11 | ELECT | 47UF 20% 50V | D5019 | 8-719-404-50 | MA111-TX | |
| C6002 | 1-104-666-11 | ELECT | 220UF 20% 25V | D5020 | 8-719-404-50 | MA111-TX | |
| C6004 | 1-126-967-11 | ELECT | 47UF 20% 50V | D5021 | 8-719-404-50 | MA111-TX | |
| C6008 | 1-117-228-11 | MYLAR | 2.2UF 10% 450V | D5022 | 8-719-404-50 | MA111-TX | |
| C6012 Δ | 1-119-888-51 | CERAMIC | 2200PF 20% 250V | D5023 | 8-719-404-50 | MA111-TX | |
| C6013 Δ | 1-119-888-51 | CERAMIC | 2200PF 20% 250V | D5024 | 8-719-404-50 | MA111-TX | |
| C6014 Δ | 1-104-708-11 | MYLAR | 0.47UF 20% 250V | D5025 | 8-719-404-50 | MA111-TX | |
| C6015 | 1-161-964-91 | CERAMIC | 0.0047UF 250V | D5026 | 8-719-404-50 | MA111-TX | |
| C6016 | 1-161-964-91 | CERAMIC | 0.0047UF 250V | D5031 | 8-719-404-50 | MA111-TX | |
| C6017 | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10% 50V | D6001 | 8-719-404-50 | MA111-TX | |
| C6018 | 1-162-974-11 | CERAMIC CHIP | 0.01UF 50V | D6002 | 8-719-948-45 | ERA22-08 | |
| C6019 | 1-126-968-11 | ELECT | 100UF 20% 50V | D6003 | 8-719-069-87 | DTZ10B | |
| C6020 | 1-126-963-11 | ELECT | 4.7UF 20% 50V | D6004 | 8-719-404-50 | MA111-TX | |
| C6021 | 1-126-964-11 | ELECT | 10UF 20% 50V | D6005 | 8-719-404-50 | MA111-TX | |
| C6022 | 1-161-964-91 | CERAMIC | 0.0047UF 250V | D6006 | 8-719-063-70 | D1NL20U | |
| C6023 | 1-161-964-91 | CERAMIC | 0.0047UF 250V | D6007 | 8-719-022-XX | D6SB60L | |
| C6025 | 1-136-479-11 | FILM | 0.001UF 2% 50V | D6009 | 8-719-083-60 | UDZSTE-174.7B | |
| C6029 | 1-136-165-00 | FILM | 0.1UF 5% 50V | D6011 | 8-719-404-50 | MA111-TX | |
| C6030 | 1-126-947-11 | ELECT | 47UF 20% 25V | D6012 | 8-719-979-64 | UF4005PKG23 | |
| C6031 | 1-137-750-11 | ELECT | 1500UF 20% 250V | D6019 | 8-719-083-60 | UDZSTE-174.7B | |
| C6032 | 1-137-750-11 | ELECT | 1500UF 20% 250V | D6023 | 8-719-068-00 | ERC04-06SE | |
| C6041 | 1-125-969-91 | CERAMIC | 680PF 10% 1KV | D6024 | 8-719-068-00 | ERC04-06SE | |
| C6042 | 1-125-969-91 | CERAMIC | 680PF 10% 1KV | D6030 | 8-719-063-70 | D1NL20U | |
| C6043 Δ | 1-104-706-11 | MYLAR | 0.22UF 20% 250V | < FUSE > | | | |
| C6046 | 1-126-968-11 | ELECT | 100UF 20% 50V | F6001 Δ 1-576-193-11 FUSE | | | |
| C6047 | 1-135-998-21 | FILM | 56000PF 3% 800V | < FERRITE BEAD > | | | |
| < CONNECTOR > | | | | FB5001 | 1-410-396-41 | FERRITE | 0.45UH |
| CN5001* | 1-564-508-11 | PLUG, CONNECTOR 5P | | FB5002 | 1-410-396-41 | FERRITE | 0.45UH |
| CN5002* | 1-564-507-11 | PLUG, CONNECTOR 4P | | FB5003 | 1-410-396-41 | FERRITE | 0.45UH |
| CN5003* | 1-564-510-11 | PLUG, CONNECTOR 7P | | FB5004 | 1-410-396-41 | INDUCTOR | 0.45UH |
| CN5004* | 1-766-177-11 | PIN, CONNECTOR (PC BOARD) 9P | | FB5005 | 1-410-396-41 | FERRITE | 0.45UH |
| CN5005 | 1-695-915-11 | TAB (CONTACT) | | FB5006 | 1-410-396-41 | FERRITE | 0.45UH |
| CN5006 | 1-695-915-11 | TAB (CONTACT) | | FB6001 | 1-410-396-41 | FERRITE | 0.45UH |
| CN5007 | 1-695-915-11 | TAB (CONTACT) | | FB6004 | 1-469-869-21 | FERRITE | 0UH |
| CN6005 | 1-580-843-11 | PIN, CONNECTOR (POWER) | | FB6005 | 1-469-869-21 | FERRITE | 0UH |
| < DIODE > | | | | FB6006 | 1-216-864-11 | SHORT | 0 |
| D5001 | 8-719-083-69 | DIODE UDZSTE-1724B | | FB6007 | 1-216-864-11 | SHORT | 0 |
| D5002 | 8-719-060-89 | D4SBS6-F | | FB6013 | 1-410-397-21 | FERRITE | 1.1UH |
| D5003 | 8-719-060-89 | D4SBS6-F | | FB6014 | 1-410-397-21 | FERRITE | 1.1UH |
| D5004 | 8-719-083-45 | DIODE 31DF4N-FC5 | | FB6015 | 1-410-397-21 | FERRITE | 1.1UH |
| D5005 | 8-719-083-45 | DIODE 31DF4N-FC5 | | FB6016 | 1-410-397-21 | FERRITE | 1.1UH |
| D5006 | 8-719-052-37 | F10P04Q | | < IC > | | | |
| D5007 | 8-719-404-50 | MA111-TX | | IC501 | 8-749-012-13 | DM-58 | |
| D5008 | 8-719-028-45 | D2L20U | | IC5002 | 8-759-103-93 | UPC393C | |
| D5009 | 8-719-028-45 | D2L20U | | IC5003 | 8-759-701-84 | NJM7905FA | |
| D5010 | 8-719-200-31 | 21DQ05 | | IC5004 | 8-759-640-19 | PQ1CG2032FZ | |
| D5011 | 8-719-404-50 | MA111-TX | | IC5005 | 8-759-198-31 | UPC1093J-1-T | |
| D5012 | 8-719-083-66 | DIODE UDZSTE-1718B | | | | | |

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

G

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|---------------------|--------------|----------------------------|--------|----------|--------------|----------------------|--------|
| IC5006 | 8-759-450-47 | BA05T | | R5016 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| IC6003 | 8-759-670-30 | MCZ3001D | | R5017 | 1-216-829-11 | RES-CHIP 4.7K 5% | 1/16W |
| < JUMPER RESISTOR > | | | | R5018 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| JR5002 | 1-216-864-11 | SHORT 0 | | R5019 | 1-216-857-11 | RES-CHIP 1M 5% | 1/16W |
| JR5003 | 1-216-864-11 | SHORT 0 | | R5020 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| JR5004 | 1-216-864-11 | SHORT 0 | | R5021 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| < COIL > | | | | R5022 | 1-218-708-11 | METAL CHIP 4.7K 0.5% | 1/16W |
| L5001 | 1-412-523-41 | INDUCTOR 6.8UH | | R5023 | 1-218-750-11 | METAL CHIP 270K 0.5% | 1/16W |
| L5002 | 1-412-523-41 | INDUCTOR 6.8UH | | R5024 | 1-218-682-11 | METAL CHIP 390 0.5% | 1/16W |
| L5003 | 1-412-529-11 | INDUCTOR 22UH | | R5025 | 1-218-697-11 | METAL CHIP 1.6K 0.5% | 1/16W |
| L5004 | 1-412-531-31 | INDUCTOR 33UH | | R5026 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| L5005 | 1-412-527-11 | INDUCTOR 15UH | | R5027 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| L5006 | 1-412-533-21 | INDUCTOR 47UH | | R5028 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| L5007 | 1-412-533-21 | INDUCTOR 47UH | | R5029 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| L5008 | 1-412-529-11 | INDUCTOR 22UH | | R5030 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| L5009 | 1-412-529-11 | INDUCTOR 22UH | | R5032 | 1-249-415-11 | CARBON 680 5% | 1/4W |
| L5012 | 1-406-663-21 | INDUCTOR 47UH | | R5034 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| L5013 | 1-412-525-31 | INDUCTOR 10UH | | R5035 | 1-216-819-11 | RES-CHIP 680 5% | 1/16W |
| L5014 | 1-406-663-21 | INDUCTOR 47UH | | R5036 | 1-216-819-11 | RES-CHIP 680 5% | 1/16W |
| L5015 | 1-424-862-11 | INDUCTOR 33UH | | R5037 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| L5016 | 1-406-663-21 | INDUCTOR 47UH | | R5038 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| L5017 | 1-412-537-31 | INDUCTOR 100UH | | R5039 | 1-216-864-11 | SHORT 0 | |
| L6001 Δ | 1-437-479-11 | TRANSFORMER, LINE FILTER | | R5040 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| L6002 Δ | 1-437-479-11 | TRANSFORMER, LINE FILTER | | R5041 | 1-215-866-11 | METAL OXIDE 330 5% | 1W |
| L6003 | 1-424-862-11 | INDUCTOR 33UH | | R5042 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| < PHOTO COUPLER > | | | | R5043 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| PH6001 | 8-749-924-35 | ON3171-R | | R5044 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W |
| PH6002 Δ | 8-749-924-35 | ON3171-R | | R5045 | 1-216-832-11 | RES-CHIP 8.2K 5% | 1/16W |
| < IC LINK > | | | | R5047 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| PS5001 Δ | 1-533-597-31 | LINK, IC | | R6002 | 1-240-251- | CMT-MELF 6.8 5% | 10W |
| PS5002 Δ | 1-533-597-31 | LINK, IC | | R6003 | 1-260-328-11 | CARBON 1K 5% | 1/2W |
| < TRANSISTOR > | | | | R6004 | 1-216-829-11 | RES-CHIP 4.7K 5% | 1/16W |
| Q5001 | 8-729-050-50 | TRANSISTOR 2SD1782K-T146-R | | R6006 | 1-216-430-11 | METAL OXIDE 390 5% | 1W |
| Q5002 | 8-729-422-27 | 2SD601A-Q | | R6007 | 1-216-823-11 | RES-CHIP 1.5K 5% | 1/16W |
| Q5003 | 8-729-026-49 | 2SA1037AK-T146-R | | R6008 | 1-216-845-11 | RES-CHIP 100K 5% | 1/16W |
| Q5004 | 8-729-422-27 | 2SD601A-Q | | R6015 | 1-219-776-11 | CARBON 2.2M 10% | 1/2W |
| Q5005 | 8-729-027-23 | DTA114EKA-T146 | | R6036 | 1-218-715-11 | METAL CHIP 9.1K 0.5% | 1/16W |
| Q5006 | 8-729-901-87 | 2SC2411K-CQ | | R6037 | 1-215-481-00 | METAL 330K 1% | 1/4W |
| Q5007 | 8-729-026-49 | 2SA1037AK-T146-R | | R6038 | 1-215-481-00 | METAL 330K 1% | 1/4W |
| Q6005 | 8-729-052-32 | IRFIB7N50A | | R6039 | 1-216-851-11 | RES-CHIP 330K 5% | 1/16W |
| Q6006 | 8-729-052-32 | IRFIB7N50A | | R6040 | 1-215-481-00 | METAL 330K 1% | 1/4W |
| < RESISTOR > | | | | R6041 | 1-218-668-11 | METAL CHIP 100 0.5% | 1/16W |
| R5005 | 1-216-831-11 | RES-CHIP 6.8K 5% | 1/16W | R6042 | 1-218-719-11 | METAL CHIP 13K 0.5% | 1/16W |
| R5006 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | R6045 | 1-218-675-11 | METAL CHIP 200 0.5% | 1/16W |
| R5007 | 1-249-377-11 | CARBON 0.47 5% | 1/4W | R6046 | 1-216-813-11 | RES-CHIP 220 5% | 1/16W |
| R5010 | 1-247-903-00 | CARBON 1M 5% | 1/4W | R6047 | 1-216-813-11 | RES-CHIP 220 5% | 1/16W |
| R5011 | 1-216-818-11 | RES-CHIP 560 5% | 1/16W | R6050 | 1-249-417-11 | CARBON 1K 5% | 1/4W |
| R5012 | 1-216-361-00 | METAL OXIDE 0.22 5% | 2W | R6054 | 1-249-393-11 | CARBON 10 5% | 1/4W |
| R5013 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | R6056 | 1-260-131-11 | CARBON 470K 5% | 1/2W |
| R5014 | 1-216-829-11 | RES-CHIP 4.7K 5% | 1/16W | R6057 | 1-260-131-11 | CARBON 470K 5% | 1/2W |
| R5015 | 1-218-708-11 | METAL CHIP 4.7K 0.5% | 1/16W | R6058 | 1-249-393-11 | CARBON 10 5% | 1/4W |
| R5016 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | R6062 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| R5017 | 1-216-829-11 | RES-CHIP 4.7K 5% | 1/16W | R6063 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W |
| R5018 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | R6064 | 1-202-933-61 | FUSIBLE 0.1 10% | 1/2W |
| R5019 | 1-216-857-11 | RES-CHIP 1M 5% | 1/16W | R6076 | 1-243-979-71 | METAL OXIDE 0.1 5% | 2W |
| R5020 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | R6080 | 1-243-979-71 | METAL OXIDE 0.1 5% | 2W |
| R5021 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | | | | |
| R5022 | 1-218-708-11 | METAL CHIP 4.7K 0.5% | 1/16W | | | | |
| R5023 | 1-218-750-11 | METAL CHIP 270K 0.5% | 1/16W | | | | |
| R5024 | 1-218-682-11 | METAL CHIP 390 0.5% | 1/16W | | | | |
| R5025 | 1-218-697-11 | METAL CHIP 1.6K 0.5% | 1/16W | | | | |
| R5026 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R5027 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | | | | |
| R5028 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | | | | |
| R5029 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R5030 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R5032 | 1-249-415-11 | CARBON 680 5% | 1/4W | | | | |
| R5034 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R5035 | 1-216-819-11 | RES-CHIP 680 5% | 1/16W | | | | |
| R5036 | 1-216-819-11 | RES-CHIP 680 5% | 1/16W | | | | |
| R5037 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | | | | |
| R5038 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | | | | |
| R5039 | 1-216-864-11 | SHORT 0 | | | | | |
| R5040 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R5041 | 1-215-866-11 | METAL OXIDE 330 5% | 1W | | | | |
| R5042 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R5043 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | | | | |
| R5044 | 1-216-821-11 | RES-CHIP 1K 5% | 1/16W | | | | |
| R5045 | 1-216-832-11 | RES-CHIP 8.2K 5% | 1/16W | | | | |
| R5047 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R6002 | 1-240-251- | CMT-MELF 6.8 5% | 10W | | | | |
| R6003 | 1-260-328-11 | CARBON 1K 5% | 1/2W | | | | |
| R6004 | 1-216-829-11 | RES-CHIP 4.7K 5% | 1/16W | | | | |
| R6006 | 1-216-430-11 | METAL OXIDE 390 5% | 1W | | | | |
| R6007 | 1-216-823-11 | RES-CHIP 1.5K 5% | 1/16W | | | | |
| R6008 | 1-216-845-11 | RES-CHIP 100K 5% | 1/16W | | | | |
| R6015 | 1-219-776-11 | CARBON 2.2M 10% | 1/2W | | | | |
| R6036 | 1-218-715-11 | METAL CHIP 9.1K 0.5% | 1/16W | | | | |
| R6037 | 1-215-481-00 | METAL 330K 1% | 1/4W | | | | |
| R6038 | 1-215-481-00 | METAL 330K 1% | 1/4W | | | | |
| R6039 | 1-216-851-11 | RES-CHIP 330K 5% | 1/16W | | | | |
| R6040 | 1-215-481-00 | METAL 330K 1% | 1/4W | | | | |
| R6041 | 1-218-668-11 | METAL CHIP 100 0.5% | 1/16W | | | | |
| R6042 | 1-218-719-11 | METAL CHIP 13K 0.5% | 1/16W | | | | |
| R6045 | 1-218-675-11 | METAL CHIP 200 0.5% | 1/16W | | | | |
| R6046 | 1-216-813-11 | RES-CHIP 220 5% | 1/16W | | | | |
| R6047 | 1-216-813-11 | RES-CHIP 220 5% | 1/16W | | | | |
| R6050 | 1-249-417-11 | CARBON 1K 5% | 1/4W | | | | |
| R6054 | 1-249-393-11 | CARBON 10 5% | 1/4W | | | | |
| R6056 | 1-260-131-11 | CARBON 470K 5% | 1/2W | | | | |
| R6057 | 1-260-131-11 | CARBON 470K 5% | 1/2W | | | | |
| R6058 | 1-249-393-11 | CARBON 10 5% | 1/4W | | | | |
| R6062 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R6063 | 1-216-833-11 | RES-CHIP 10K 5% | 1/16W | | | | |
| R6064 | 1-202-933-61 | FUSIBLE 0.1 10% | 1/2W | | | | |
| R6076 | 1-243-979-71 | METAL OXIDE 0.1 5% | 2W | | | | |
| R6080 | 1-243-979-71 | METAL OXIDE 0.1 5% | 2W | | | | |

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.


KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908



| REF. NO. | PART NO. | DESCRIPTION | REMARK | | |
|--|----------------|------------------------|-----------|-----|-------|
| R6081 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W |
| < RELAY > | | | | | |
| RY6002△1-755-395-11 RELAY (AC POWER) | | | | | |
| RY6003△1-755-395-11 RELAY (AC POWER) | | | | | |
| < TRANSFORMER > | | | | | |
| T6001 △ 1-437-436-11 CONVERTER TRANSFORMER (PIT) | | | | | |
| T6004 △ 1-435-675-11 TRANSFORMER, STANDBY | | | | | |
| < POSISTOR > | | | | | |
| TH6002 | 1-804-475-21 | POSISTOR | | | |
| < VARISTOR > | | | | | |
| VD6001 | 1-801-073-31 | VARISTOR TNR14V471K660 | | | |
| ***** | | | | | |
| * A-1372-934-A H4 BOARD, COMPLETE | | | | | |
| ***** | | | | | |
| < CAPACITOR > | | | | | |
| C9401 | 1-107-826-11 | CERAMIC CHIP | 0.1UF | 10% | 16V |
| < CONNECTOR > | | | | | |
| CN9401* | 1-564-518-11 | PLUG, CONNECTOR 3P | | | |
| < DIODE > | | | | | |
| D9401 | 8-719-921-8838 | | RD5.6ESB2 | | |
| D9402 | 8-719-921-8838 | | RD5.6ESB2 | | |
| < IC > | | | | | |
| IC9401 | 8-719-066-43 | GP1U28Y | | | |
| < RESISTOR > | | | | | |
| R9401 | 1-216-833-11 | RES-CHIP | 10K | 5% | 1/16W |
| R9402 | 1-216-809-11 | RES-CHIP | 100 | 5% | 1/16W |
| ***** | | | | | |
| * A-1391-148-A S BOARD, COMPLETE | | | | | |
| ***** | | | | | |
| < CONNECTOR > | | | | | |
| CN3001* | 1-564-506-11 | PLUG, CONNECTOR 3P | | | |
| < DIODE > | | | | | |
| D3001 | 8-719-109-89 | RD5.6ESB2 | | | |
| < SOLAR BATTERY > | | | | | |
| S3002 | 1-756-063-21 | BATTERY, SOLAR | | | |
| ***** | | | | | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK | | |
|-----------------------------------|--------------|--------------------|--------|------|-------|
| * A-1372-932-A H2 BOARD, COMPLETE | | | | | |
| ***** | | | | | |
| < CONNECTOR > | | | | | |
| CN9201* | 1-564-520-11 | PLUG, CONNECTOR 5P | | | |
| CN9202 | 1-564-521-11 | PLUG, CONNECTOR 6P | | | |
| < RESISTOR > | | | | | |
| R9201 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R9202 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R9203 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R9204 | 1-218-684-11 | METAL CHIP | 470 | 0.5% | 1/16W |
| R9205 | 1-218-688-11 | METAL CHIP | 680 | 0.5% | 1/16W |
| R9206 | 1-218-688-11 | METAL CHIP | 680 | 0.5% | 1/16W |
| R9207 | 1-218-692-11 | METAL CHIP | 1K | 0.5% | 1/16W |
| R9208 | 1-218-696-11 | METAL CHIP | 1.5K | 0.5% | 1/16W |
| R9209 | 1-218-700-11 | METAL CHIP | 2.2K | 0.5% | 1/16W |
| R9210 | 1-218-704-11 | METAL CHIP | 3.3K | 0.5% | 1/16W |
| R9211 | 1-218-712-11 | METAL CHIP | 6.8K | 0.5% | 1/16W |
| < SWITCH > | | | | | |
| S9201 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9202 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9203 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9204 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9205 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9206 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9207 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9208 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9209 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9210 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9211 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| S9212 | 1-572-198-11 | SWITCH, KEYBOARD | | | |
| ***** | | | | | |
| * A-1377-001-A H1 BOARD, COMPLETE | | | | | |
| ***** | | | | | |
| < CONNECTOR > | | | | | |
| CN9101* | 1-564-508-11 | PLUG, CONNECTOR 5P | | | |
| < DIODE > | | | | | |
| D9101 | 8-719-053-43 | SLR-325VCT31 | | | |
| D9102 | 8-719-053-43 | SLR-325VCT31 | | | |
| < RESISTOR > | | | | | |
| R9103 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| R9104 | 1-216-813-11 | RES-CHIP | 220 | 5% | 1/16W |
| < SWITCH > | | | | | |
| S9101 | 1-571-532-21 | SWITCH, TACTIL | | | |
| ***** | | | | | |

Les composants identifiés par une trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

KP-43HT20/53HS20/53HS30/61HS20/61HS30
RM-Y908 RM-Y908 RM-Y908 RM-Y908 RM-Y908

H1 H3

REF. NO. PART NO. DESCRIPTION REMARK

* A-1372-933-A H3 BOARD, COMPLETE

< CAPACITOR >

| | | | | | |
|-------|--------------|--------------|--------|-----|-----|
| C9301 | 1-126-964-11 | ELECT | 10UF | 20% | 50V |
| C9302 | 1-126-964-11 | ELECT | 10UF | 20% | 50V |
| C9303 | 1-126-959-11 | ELECT | 0.47UF | 20% | 50V |
| C9304 | 1-126-959-11 | ELECT | 0.47UF | 20% | 50V |
| C9305 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10% | 25V |

< CONNECTOR >

CN9301 * 1-564-526-11 PLUG, CONNECTOR 11P

< DIODE >

| | | |
|-------|--------------|----------|
| D9301 | 8-719-110-53 | RD10ESB2 |
| D9302 | 8-719-110-53 | RD10ESB2 |
| D9303 | 8-719-110-53 | RD10ESB2 |
| D9304 | 8-719-110-53 | RD10ESB2 |
| D9305 | 8-719-110-53 | RD10ESB2 |

| | | |
|-------|--------------|----------|
| D9306 | 8-719-110-53 | RD10ESB2 |
|-------|--------------|----------|

< JACK >


J9301 1-565-929-11 TERMINAL BLOCK, S 3P

< RESISTOR >


| | | | | | |
|-------|--------------|----------|------|----|-------|
| R9301 | 1-216-821-11 | RES-CHIP | 1K | 5% | 1/16W |
| R9302 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W |
| R9303 | 1-216-853-11 | RES-CHIP | 470K | 5% | 1/16W |
| R9304 | 1-218-285-11 | RES-CHIP | 75 | 5% | 1/16W |
| R9305 | 1-218-285-11 | RES-CHIP | 75 | 5% | 1/16W |


| | | | | | |
|-------|--------------|----------|----|----|-------|
| R9306 | 1-218-285-11 | RES-CHIP | 75 | 5% | 1/16W |
|-------|--------------|----------|----|----|-------|


MISCELLANEOUS

 A-1501-975-A COUPLER (R) ASSY, CRT
(53HS20,53HS30)


 A-1501-976-A COUPLER (G) ASSY, CRT

 A-1501-977-A COUPLER (B) ASSY, CRT
(53HS20,53HS30)


 A-1501-978-A COUPLER (R) ASSY CRT
(61HS20,61HS30)

 A-1501-979-A COUPLER (B) ASSY CRT
(61HS20,61HS30)

 A-1501-980-A COUPLER (R) ASSY, CRT (43HT20)

 A-1501-981-A COUPLER (B) ASSY, CRT (43HT20)

 1-223-925-11 RESISTOR ASSY (FOCUS PACK)

 1-451-535-11 COIL ASSY, VM

 1-451-537-11 DEFLECTION YOKE

1-500-021-11 CLAMP, SLEEVE FERRITE
1-529-403-11 SPEAKER (6.6CM)
1-543-653-11 CORE ASSY, BEAD (DIVISION TYPE)
1-544-849-11 SPEAKER (13CM) (EXCEPT 43HT20)
1-544-893-11 SPEAKER (10CM) (43HT20)

* 1-556-945-21 CABLE, P-P
* 1-557-056-31 CABLE, P-P
1-771-787-11 SWITCH, RF ANTENNA

 1-790-130-11 CORD, AC POWER (WITH CONNECTOR)

 8-598-955-31 BLOCK ASSY, HV HVB-1031

ACCESSORIES & PACKING MATERIALS

* 4-041-423-01 SHEET, PROTECTION (43HT20)
* 4-041-426-01 BAG, PROTECTION (53HS20,53HS30)
* 4-042-463-01 SHEET, PROTECTION (EXCEPT 43HT20)
* 4-049-155-01 BAG, PROTECTION (43HT20)
* 4-069-575-02 TRAY (53HS20,53HS30)

* 4-069-584-01 TRAY (61HS20,61HS30)
* 4-069-585-02 CUSHION (UPPER) (ASSY) (61HS20,61HS30)
* 4-076-420-01 BAG, PROTECTION (61HS20,61HS30)
* 4-080-860-11 CUSHION UPPER (ASSY) (53HS20,53HS30)
* 4-080-866-01 CUSHION UPPER (ASSY) (43HT20)

4-081-143-11 MANUAL, INSTRUCTION
4-081-143-21 MANUAL, INSTRUCTION
4-081-143-31 MANUAL, INSTRUCTION
* 4-081-544-01 CUSHION, LOWER (ASSY) (53HS20,53HS30)
* 4-081-591-01 TRAY (43HT20)

* 4-081-619-01 CUSHION, LOWER ASSY (43HT20)
* 4-081-694-01 CUSHION, LOWER ASSY (61HS20)
* 4-083-615-01 INDIVIDUAL CARTON (53HS20,53HS30)
* 4-083-685-01 INDIVIDUAL CARTON (61HS20,61HS30)
* 4-083-695-01 CARTON, INDIVIDUAL (43HT20)

REMOTE COMMANDER

1-476-853-11 REMOTE COMMANDER (RM-Y908)



Projection TV

Operating Instructions

KP-43HT20

KP-53HS20

KP-53HS30

KP-61HS20

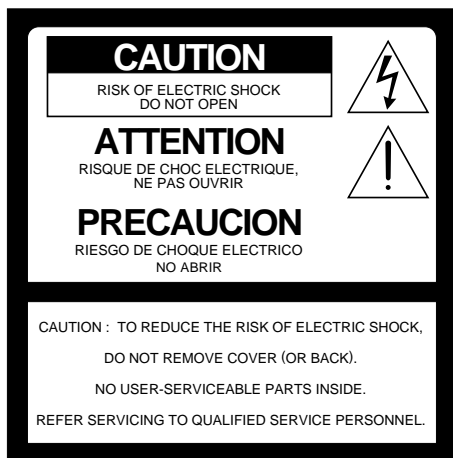
KP-61HS30

Hi-Scan
1080i

DRC-MF
Digital Reality Creation

WARNING

To prevent fire or shock hazard, do not expose the projection TV to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

To prevent electric shock, do not use this polarized AC plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

CAUTION

When using TV games, computers, and similar products with your projection TV, or viewing a TV station whose logo always stays on the screen, keep the brightness and contrast functions at low settings. If a fixed (non-moving) pattern such as a station logo is left on the screen for long periods of time, especially at a high brightness or contrast setting, the image can be permanently imprinted onto the screen. These types of imprints are not covered by your warranty.

Note on Caption Vision

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

Note on convergence adjustment

Before you use your projection TV, make sure to adjust convergence. For details, see “Adjusting the Convergence Automatically – FLASH FOCUS™ –” on page 33.

Note to CATV system installer

This reminder is provided to call the CATV system installer’s attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Use of this television receiver for other than private viewing of programs broadcast on UHF, VHF, transmitted by cable companies or satellite for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

NOTIFICATION

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ☐ Reorient or relocate the receiving antennas.
- ☐ Increase the separation between the equipment and receiver.
- ☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ☐ Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This document is for the remote control RM-Y908.

MODELS: KP-43HT20, KP-53HS20, KP-53HS30, KP-61HS20, KP-61HS30

Please keep this notice with the instruction manual.

Safety

- ❑ Operate the projection TV only on 120 V AC.
- ❑ The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- ❑ If any liquid or solid object should fall inside the cabinet, unplug the projection TV immediately and have it checked by qualified service personnel before operating it further.
- ❑ If you will not be using the projection TV for several days, disconnect the power by pulling the plug itself. Never pull on the cord.

For details concerning safety precautions, see “Important Safeguards” on page 4.

Installing

- ❑ To prevent internal heat buildup, do not block the ventilation openings.
- ❑ Do not install the projection TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- ❑ Avoid operating the projection TV at temperature below 5°C (41°F).
- ❑ If the projection TV is transported directly from a cold to a warm location, or if the room temperature changes suddenly, the picture may be blurred or show poor color. In this case, please wait a few hours to let the moisture evaporate before turning on the projection TV.
- ❑ To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the projection TV in a room where the floor and walls are not of a reflective material.



As an ENERGY STAR® Partner, Sony Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

ENERGY STAR® is a U.S. registered mark.



TruSurround is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks

of SRS Labs, Inc. in the United States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and is protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents. Purchase of this product does not convey the right to sell recordings made with the TruSurround technology.

BBE and BBE Symbol are trademarks of BBE Sound, Inc. and are licensed by BBE Sound, Inc. under U.S. Patent No. 4,638,258 and 4,482,866.

ATTENTION

Pour prévenir les chocs électriques, ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans en laisser aucune partie à découvert.

Owner's Record

The model and serial numbers are located at the rear of the projection TV, below the Sony logo, on the sticker, and also on the TV box (white label). Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____

Serial No. _____

Important Safeguards

For your protection, please read these instructions completely, and keep this manual for future reference.

Carefully observe and comply with all warnings, cautions and instructions placed on the set or described in the operating instructions or service manual.

WARNING

To guard against injury, the following basic safety precautions should be observed in the installation, use and servicing of the set.

Use

Power Sources

This set should be operated only from the type of power source indicated on the serial/model plate. If you are not sure of the type of electrical power supplied to your home, consult your dealer or local power company. For those sets designed to operate from battery power, refer to the operating instructions.



Grounding or Polarization

This set is equipped with a polarized AC power cord plug (a plug having one blade wider than the other), or with a three-wire grounding type plug (a plug having a third pin for grounding). Follow the instructions below:

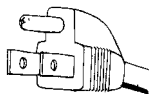
For the set with a polarized AC power cord plug

This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the polarized plug by forcing it in.



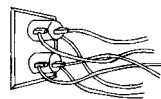
Alternate Warning for the set with a three-wire grounding type AC plug

This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the grounding plug.



Overloading

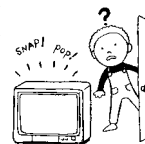
Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.



Always turn the set off when it is not being used. When the set is left unattended and unused for long periods of time, unplug it from the wall outlet as a precaution against the possibility of an internal malfunction that could create a fire hazard.



If a snapping or popping sound from a TV set is continuous or frequent while the TV is operating, unplug the TV and consult your dealer or service technician. It is normal for some TV sets to make occasional snapping or popping sounds, particularly when being turned on or off.



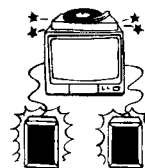
Object and Liquid Entry

Never push objects of any kind into the set through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the set.



Attachments

Do not use attachments not recommended by the manufacturer, as they may cause hazards.



Cleaning

Clean the cabinet of the projection TV with a dry soft cloth. To remove dust from the screen, wipe it gently with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with solution of mild soap and warm water. Never use strong solvents such as thinner or benzene for cleaning.



If the picture becomes dark after using the projection TV for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel.

Installation

Water and Moisture

Do not use power-line operated sets near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



Accessories

Do not place the set on an unstable cart, stand, table or shelf. The set may fall, causing serious injury to a child or an adult and serious damage to the set. Use only a cart or stand recommended by the manufacturer for the specific model of projection TV. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Ventilation

The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of the set, and to protect it from overheating, these slots and openings must never be blocked or covered.

- ☐ Never cover the slots and openings with a cloth or other materials.
- ☐ Never block the slots and openings by placing the set on a bed, sofa, rug or other similar surface.
- ☐ Never place the set in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.
- ☐ Do not place the set near or over a radiator or heat register, or where it is exposed to direct sunlight.



Power-Cord Protection

Do not allow anything to rest on or roll over the power cord, and do not place the set where the power cord is subject to wear or abuse.



Antennas

Outdoor Antenna Grounding

If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

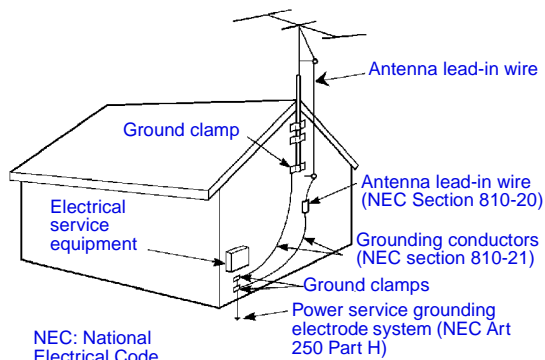
WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electrical Code (NEC) in USA and Section 54 of the Canadian Electrical Code in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Antenna Grounding According to the NEC

Refer to section 54-300 of Canadian Electrical Code for Antenna Grounding.



Lightning

For added protection for this television receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the receiver due to lightning and power-line surges.

Service

Damage Requiring Service

Unplug the set from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- ❑ When the power cord or plug is damaged or frayed.
- ❑ If liquid has been spilled into the set.
- ❑ If the set has been exposed to rain or water.
- ❑ If the set has been subject to excessive shock by being dropped, or the cabinet has been damaged.
- ❑ If the set does not operate normally when following the operating instructions. Adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the set to normal operation.
- ❑ When the set exhibits a distinct change in performance, it indicates a need for service.



Safety Check

Upon completion of any service or repairs to the set, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the set is in safe operating condition, and to so certify. When the set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the set.



For Safety

Be careful when moving the projection TV

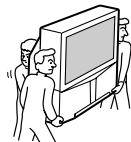
When you place the projection TV in position, be careful not to drop it on your foot or fingers.



Watch your footing while installing the projection TV.

Carry the projection TV in the specified manner

If you carry the projection TV in a manner other than the specified manner and without the specified number of persons, it may drop and a serious injury may be caused. Be sure to follow the instructions mentioned below.



- ❑ Carry the projection TV with the specified number of persons. (see page 10)
- ❑ Do not carry the projection TV holding the speaker grill.
- ❑ Hold the projection TV tightly when carrying it.

Servicing

Do not attempt to service the set yourself since opening the cabinet may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.



Replacement Parts

When replacement parts are required, be sure the service technician certifies in writing that he has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock or other hazards.

Contents

| | |
|----------------------------|---|
| Important Safeguards | 4 |
|----------------------------|---|

Introducing the Sony Projection TV

| | |
|---|---|
| Presenting the Sony Projection TV | 8 |
| Using this manual | 9 |

Installing and Connecting the Projection TV

| | |
|--|----|
| Contents | 10 |
| Inserting Batteries to the Remote Control | 10 |
| Carrying Your Projection TV | 10 |
| Installing the Projection TV | 11 |
| Connector Types | 12 |
| Projection TV Controls and Connectors | 13 |
| Basic Connections (Connecting Cable TV or Antenna)..... | 16 |
| Connecting a VCR and Cable | 19 |
| Connecting a VCR and Cable Box | 20 |
| Connecting Two VCRs for Tape Editing | 22 |
| Connecting a Satellite Receiver | 23 |
| Connecting a Satellite Receiver with a VCR..... | 24 |
| Connecting an Audio Receiver | 25 |
| Connecting a DVD Player with Component Video Connectors | 26 |
| Connecting a DVD Player with A/V Connectors | 27 |
| Connecting a Digital TV Receiver..... | 28 |
| Connecting a Camcorder | 29 |
| Connecting an AV Receiver | 30 |
| Using the CONTROL S Feature | 31 |
| Setting Up the Projection TV Automatically..... | 32 |
| Adjusting the Convergence Automatically – FLASH FOCUS™ – | 33 |

Using the Features

| | |
|---------------------------------|----|
| Using the Remote Control | 34 |
| Watching the TV | 37 |
| Watching the Digital TV | 39 |
| Using Favorite Channels..... | 40 |
| Using Twin View™ | 41 |
| Using the Freeze Function | 44 |
| Using Channel Index | 45 |

Using the Menus

| | |
|------------------------------|----|
| Overview..... | 47 |
| Using the Video Menu..... | 48 |
| Using the Audio Menu..... | 50 |
| Using the Channel Menu | 52 |
| Using the Parent Menu | 54 |
| Using the Timer Menu..... | 62 |
| Using the Setup Menu | 63 |

Other Information

| | |
|---|----|
| Programming the Remote Control | 65 |
| Operating Other Components with Your Projection TV Remote Control | 68 |
| Troubleshooting..... | 70 |
| Specifications..... | 73 |

Introducing the Sony Projection TV

Presenting the Sony Projection TV

Thank you for purchasing the Sony Projection TV.

This manual is for models KP-43HT20, KP-53HS20, KP-53HS30, KP-61HS20 and KP-61HS30.

Model KP-53HS30 is used for illustration purposes.

Features

Some of the features that you will enjoy with your new projection TV include:

- ❑ **Hi Scan 1080™**: Enables you to receive the 1080i, 720p, 480p and 480i digital TV formats. By using the VIDEO 5/6 IN jacks, you can connect a DTV (digital television) receiver to view DTV programs.
- ❑ **DRC™ Multi-Function**: Unlike conventional line doublers, the DRC feature doubles vertical and horizontal lines, resulting in four times the density for quality sources such as DVD, Satellite and Digital camcorder.
- ❑ **CineMotion™**: Using the 2-3 Pull-Down technology, the CineMotion feature allows you to obtain a smooth picture movement when playing back movies or other video sources on film.
- ❑ **Twin View™**: Using Multi-Image Driver (MID-X), Twin View allows you to watch two programs side by side with the ability to zoom in one picture and listen to selected window. You can watch pictures from two different sources (1080i, 720p, 480p or 480i) simultaneously.
- ❑ **16:9 Enhancement**: Vertical Compression technology that maximizes picture resolution on “anamorphic” or “enhanced for wide screen” sources, including selected DVDs.
- ❑ **Steady Sound™**: Equalizes volume levels so there is consistent output between programs and commercials.
- ❑ **Parental Control**: V-Chip technology allows parents to block unsuitable programming for younger viewers.
- ❑ **Component Video Inputs**: Offers the best video quality for DVD (480p, 480i) and Digital Set-top box (1080i, 720p, 480p, 480i) connections.
- ❑ **S-VIDEO Inputs**: Provides a high-quality image for connected equipment.
- ❑ **Favorite Channel Preview**: Preview up to eight favorite channels without leaving the current channel.

- ❑ **Channel Index:** Allows you to view and choose from twelve programs.
- ❑ **Flash Focus™:** Allows you to adjust convergence automatically.

Using this manual

We recommend that you carefully review the contents of the following four sections in the order provided to ensure that you fully understand the operation of your new projection TV.

1 Installing and Connecting the Projection TV

This section guides you through your initial setup. It shows you how to install your projection TV, to connect your new components and to connect the antenna and cable.

2 Using the Features

This section shows you how to begin using your new projection TV. It shows you how to use your remote control functions.

3 Using the menus

This section teaches you how to access on-screen menus and adjust your projection TV settings.

Instructions in this manual are written for the remote control. Similar controls may be found on the projection TV console.

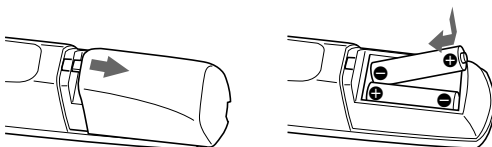
Installing and Connecting the Projection TV




Contents

Your box contains your new projection TV, a remote control and two AA batteries. No peripheral cables are included. If you intend to add additional equipment to your projection TV, please check the hookup instructions for your desired setup before you begin. You may need to purchase cables and/or splitters to complete the hookup properly.

Inserting Batteries to the Remote Control

Insert two size AA (R6) batteries (supplied) by matching the + and – on the batteries to the diagram inside the battery compartment.



-  Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.
-  Handle the remote control with care. Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater, or where the humidity is high.
-  Your remote control can be programmed to operate most video equipment. (See "Programming the Remote Control" on page 65.)

Carrying Your Projection TV

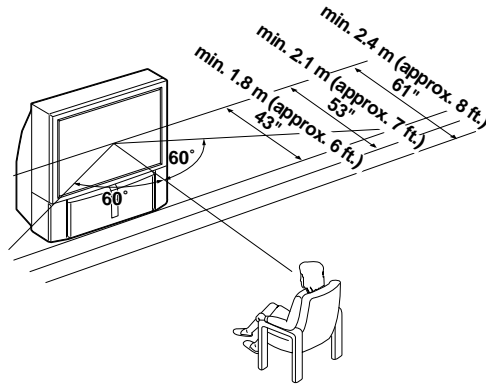
Carrying the projection TV requires three or more people.

The projection TV has been equipped with casters for easy movement on a hard surface. (for KP-53HS20, KP-53HS30, KP-61HS20 and KP-61HS30 only)

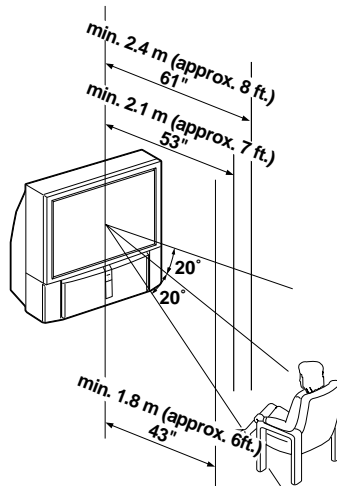
Please move your projection TV using the casters.

Installing the Projection TV

Recommended viewing area (Horizontal)



Recommended viewing area (Vertical)



Connector Types

You may find it necessary to use some of the following connector types during set up.

Coaxial cable

Standard TV cable and antenna cable

Plug Type



Screw-on Type



S Video cable

High quality video cable for enhanced picture quality



Audio/Video cable



Video - Yellow

Audio (Left) - White

Audio (Right) - Red

Some DVD Players are equipped with the following three video connectors.

Y - Green

P_B (C_B, C_b or B-Y) - Blue

P_R (C_R, C_r or R-Y) - Red

CONTROL S cable

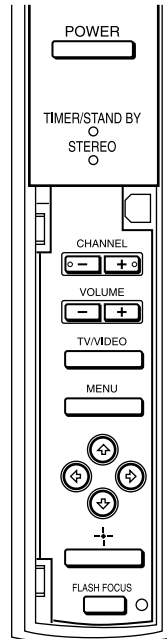
CONTROL S connections are exclusive to Sony products and allow greater control of all Sony equipment.



Projection TV Controls and Connectors

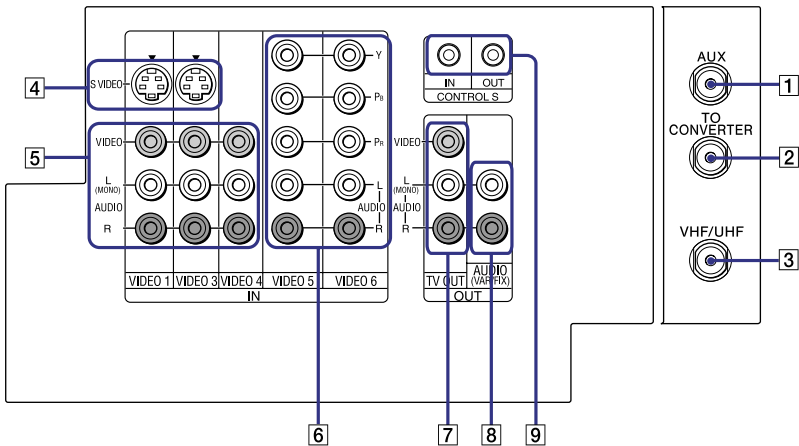
Front Panel Menu Controls

The front panel menu controls allow access to the on-screen menus without the use of a remote control. Pressing MENU brings up the on-screen menus. The arrow buttons move the on-screen cursor in the menus and the Select button (↵) selects the menu item.

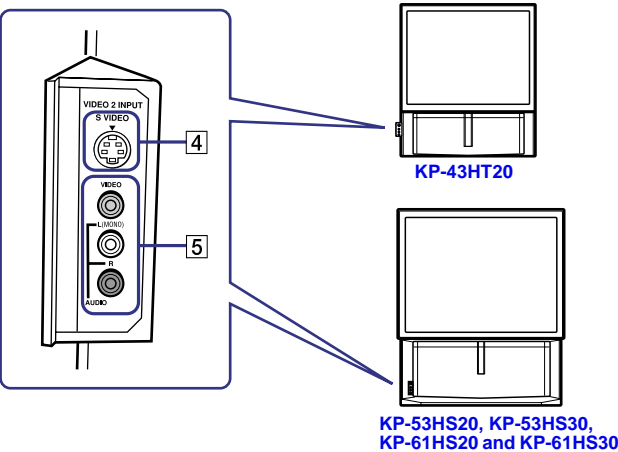


Projection TV Rear
and Front/Side
Panel Connectors

Rear of projection TV



Front or side of projection TV



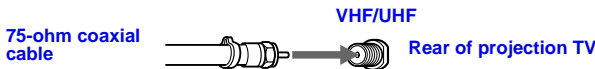
| Connection | Description |
|---|---|
| 1 AUX | Allows you to view local and cable channels if your cable provider does not feature local channels. You can switch between local and cable channels easily by pressing ANT on the remote control. Devices connected to the AUX input cannot be viewed in Twin View. |
| 2 TO CONVERTER | This is a VHF/UHF OUT jack that lets you set up your projection TV to switch between scrambled channels (through a cable box) and normal cable channels (CATV). Use this jack instead of a splitter to get better picture quality when switching between scrambled and unscrambled cable channels. |
| 3 VHF/UHF | Connects to your VHF/UHF antenna or cable. |
| 4 S VIDEO (Rear and front/ side) | Connects to the S VIDEO OUT jack of your VCR or other S VIDEO-equipped video component. Provides better picture quality than the VHF/UHF jacks or the Video IN jack. |
| 5 VIDEO (L/R)/AUDIO (Rear and front/ side) | Connects to the audio and video OUT jacks on your VCR or other video component. A fourth video input (VIDEO 2) is located on the side panel (for KP-43HT20) or the front panel (for KP-53HS20, KP-53HS30, KP-61HS20 and KP-61HS30) of the projection TV. |
| 6 Y/PB/PR (L/R)/AUDIO | Connects to your DVD player's or Digital Set-top box's component video (Y, PB, PR) and audio (L/R) jacks. |
| 7 TV OUT | Connects to an AV receiver for greater control of all audio and video equipment. (see page 30) For detailed information about connection, refer to the operating manual supplied with the AV receiver. |
| 8 AUDIO OUT (VAR/FIX) L (MONO)/R | Connects to the left and right audio inputs of your audio or video component. |
| 9 CONTROL S IN/OUT | <p>To control other Sony equipment with the projection TV's remote control, connect the CONTROL S IN jack of the equipment to the CONTROL S OUT jack on the projection TV with the CONTROL S cable.</p> <p>To control the projection TV with a remote control for another Sony product, connect the CONTROL S OUT jack of the equipment to the CONTROL S IN jack on the projection TV with the CONTROL S cable.</p> |

Basic Connections (Connecting Cable TV or Antenna)

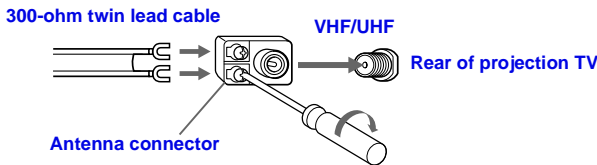
Connecting Directly to Cable or an Antenna

The connection you choose depends on the cable found in your home. Newer homes are equipped with standard coaxial cable (see **A**); older homes probably have 300-ohm twin lead cable (see **B**); other homes may contain both (see **C**).

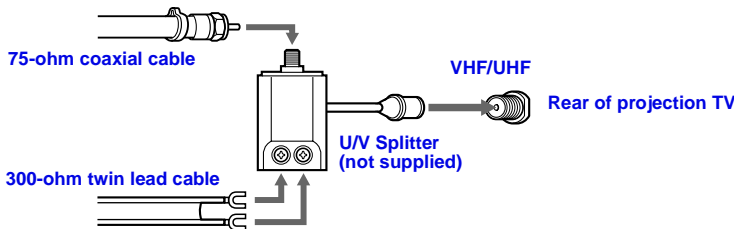
A VHF Only or VHF/UHF or Cable



B VHF Only or UHF Only or VHF/UHF

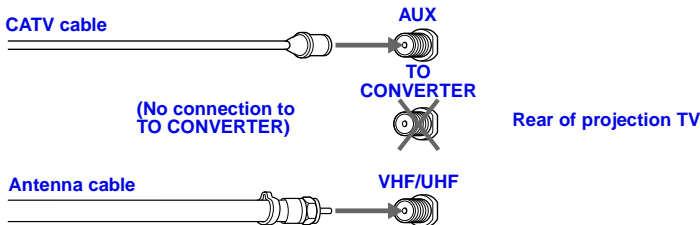


C VHF and UHF



Cable and Antenna

If your cable provider does not feature local channels, you may find this set up convenient.



Select CABLE or antenna (ANT) mode by pressing ANT on the remote control.

To receive channels with an antenna, you need to turn your Cable to OFF (see page 52) and perform the Auto Program function (see page 53).

Cable Box Connections

Cable Box and Cable

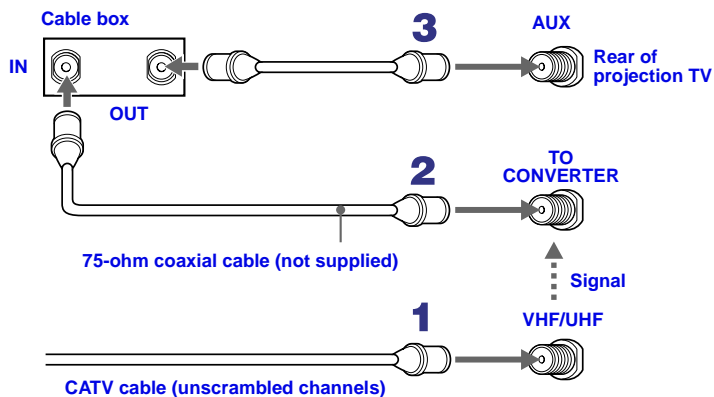
This is the preferred basic cable TV hookup to use if:

- ❑ Your cable TV company scrambles some channels, but not all of them (pay channels vs. regular cable channels) and you need to use a cable box, and
- ❑ You want to enjoy the Twin View feature.

With this setup you can:

- ❑ Use the projection TV remote control to change channels using your cable box when the signal is scrambled.
- ❑ Use the projection TV remote control to change channels using your projection TV when the signal is not scrambled. (Your projection TV's tuner provides a better signal than the cable box.)
- ❑ Use the Twin View feature. (When all channels are routed through your cable box, only one channel is sent to the projection TV, so you can not use the Twin View or Channel Index features for your cable box.)

- 1 Connect the Cable TV cable to the projection TV's VHF/UHF jack.
- 2 Using a coaxial cable, connect the projection TV's TO CONVERTER jack to the cable box's IN jack. The projection TV's internal converter allows you to switch between unscrambled signals coming straight into the projection TV and scrambled signals coming in through the cable box, eliminating the need for an external splitter.
- 3 Using a coaxial cable, connect the cable box's OUT jack to the projection TV's AUX jack.



Pressing ANT on the remote control switches between the channels coming in through the cable box (scrambled) and those coming directly to the TV (unscrambled).

(Continued)

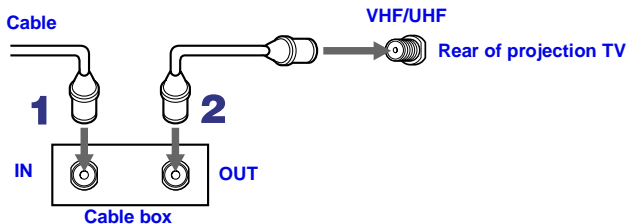
Cable Box Only

Use this hookup if:


- ❑ You subscribe to a cable TV system that uses scrambled or encoded signals requiring a cable box to view all channels, and
- ❑ You do not intend to hookup any other audio or video equipment to your projection TV.




When all channels are routed through your cable box, only one unscrambled channel is sent to the projection TV, so you cannot use the Twin View feature. If some channels are scrambled, but others are not, consider using the hookup on page 17 instead.

- 1 Connect the coaxial connector from your cable service to the cable box's IN jack.
- 2 Using a coaxial cable, connect the cable box's OUT jack to the TV's VHF/UHF jack.



Also, set Cable to ON in the Channel menu. (see page 52)

 Setting the Channel Fix feature in the Channel menu (see "Using the Channel Menu" on page 52) ensures that you do not accidentally switch the channels using your projection TV.

-  If you will be controlling all channel selection through your cable box, consider using the Channel Fix feature to set your projection TV to channel 3 or 4. (see page 53)
-  Your Sony remote control can be programmed to operate your cable box. (see "Programming the Remote Control" on page 65)
-  To change channels using the cable box, set your projection TV to channel 3 or 4 depending on the cable box channel output.

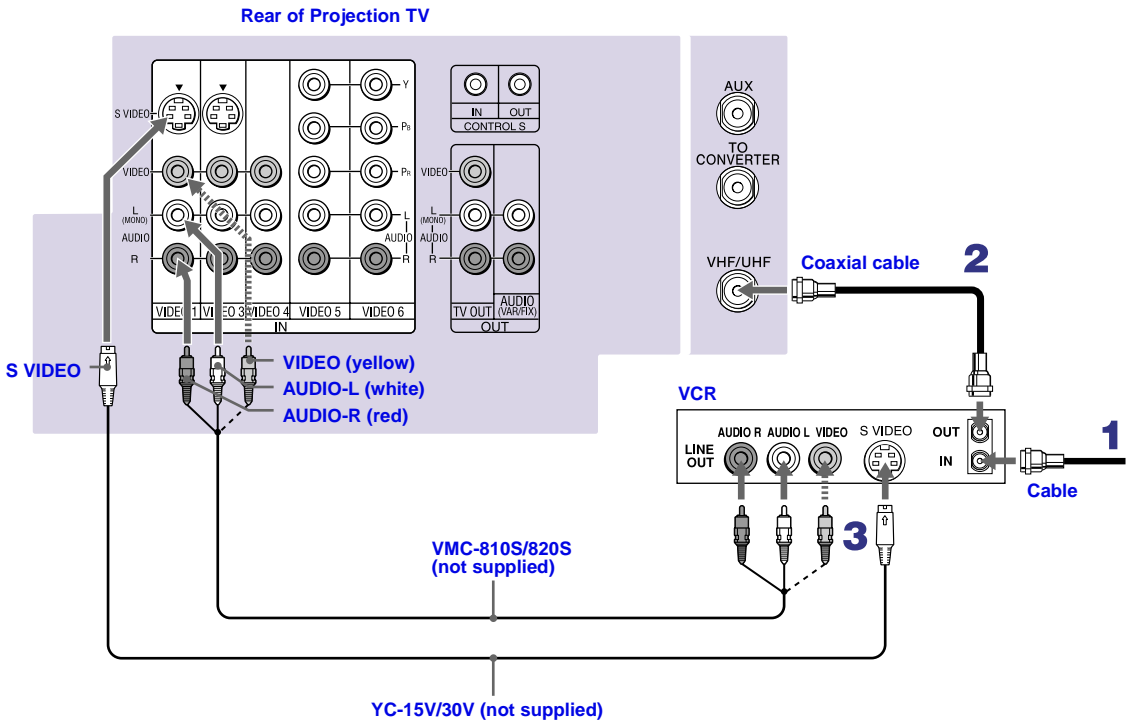
Connecting a VCR and Cable

Use this hookup if:

- You have cable TV that does not require a cable box.

Disconnect all power sources before making any connections.

- 1 Connect the cable TV cable to the VCR's IN jack.
- 2 Using a coaxial cable, connect the VCR's OUT jack to the projection TV's VHF/UHF jack.
- 3 Using AUDIO and S VIDEO cables, connect the VCR's Audio and Video OUT jacks to the projection TV's AUDIO and S VIDEO IN jacks.



If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

Connecting a VCR and Cable Box

Use this hookup if:

- ❑ Your cable TV company scrambles some channels, but not all of them (pay channels vs. regular cable channels) and you need to use a cable box, and
- ❑ You want to enjoy the Twin View feature.

With this setup you can:

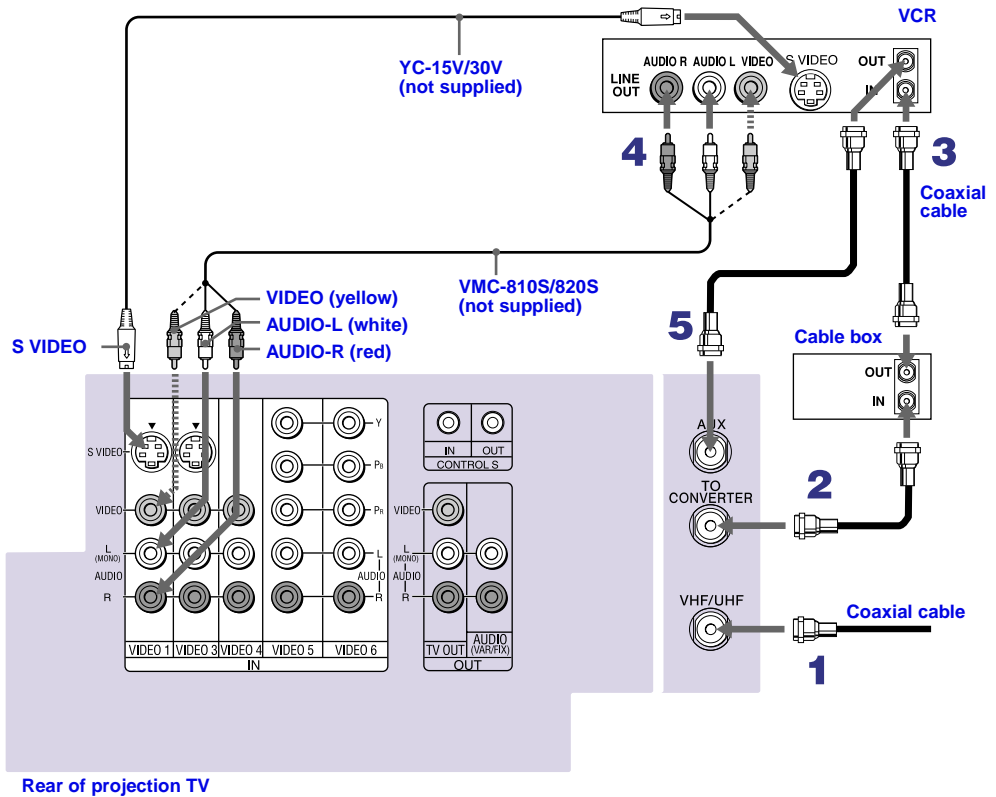
- ❑ Use the projection TV remote control to change channels using your cable box when the signal is scrambled.
- ❑ Use the projection TV remote control to change channels using your projection TV when the signal is not scrambled. Your projection TV's tuner provides a better signal than the cable box.
- ❑ Use the Twin View feature. (When all channels are routed through your cable box, only one signal is sent to the projection TV, so you cannot use the Twin View feature.)

Disconnect all power sources before making any connections.

- 1** Connect the Cable TV cable to the projection TV's VHF/UHF jack.
- 2** Using a coaxial cable, connect the TV's TO CONVERTER jack to the cable box's IN jack. The projection TV's internal converter allows you to switch between unscrambled signals coming straight into the projection TV and scrambled signals coming in through the cable box, eliminating the need for an external splitter.
- 3** Using a coaxial cable, connect the cable box's OUT jack to the VCR's IN jack.
- 4** Using AUDIO and S VIDEO cables, connect the VCR's AUDIO and S VIDEO OUT jacks to the projection TV's AUDIO and S VIDEO IN jacks.
- 5** Using a coaxial cable, connect the VCR's OUT jack to the projection TV's AUX jack.



To view scrambled channels, set your projection TV to AUX 3 or 4 (depending on your cable box output). Change channels using your cable box.



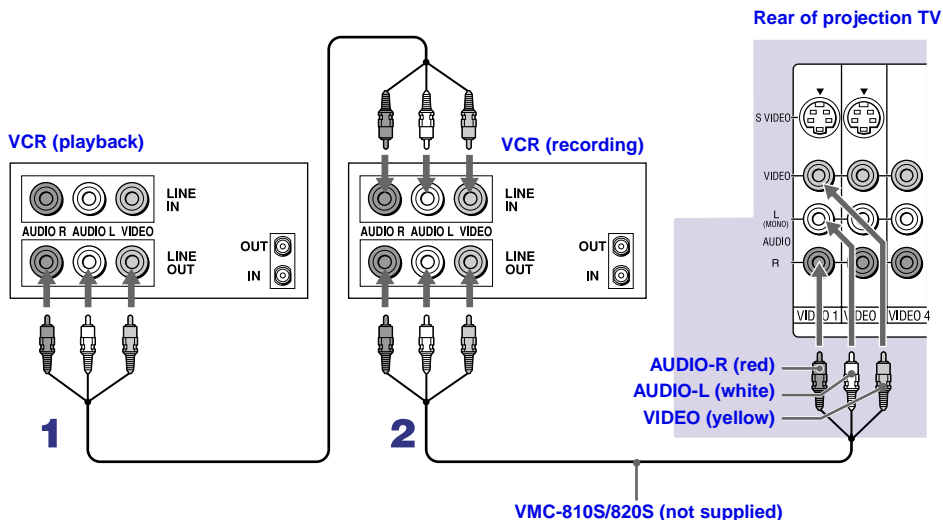
- ⚠ If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.
- ⚠ You will not be able to change channels on the VCR. Set your projection TV and VCR to channel 3 or 4, depending on your cable box channel output.
- ⚠ Pressing ANT on the remote control switches between the channels coming in through the cable box (scrambled) and those coming directly to the projection TV (unscrambled).

Connecting Two VCRs for Tape Editing

Connecting two VCRs together, then into the projection TV, allows you to switch between the two to be sure that what you are playing on one is recording on the other.

Disconnect all power sources before making any connections.

- 1 Using AUDIO and VIDEO cables, connect the playback VCR's Audio and Video OUT jacks to the recording VCR's Audio and Video IN jacks.
- 2 Using AUDIO and VIDEO cables, connect the recording VCR's AUDIO and Video OUT jacks to the projection TV's AUDIO and VIDEO IN jacks.



- To perform tape editing, set the projection TV to the video input intended for playback by pressing TV/VIDEO on the remote control.
- You may need to change the video input on your VCR. Consult your VCR's operating manual for instructions.
- If your VCRs have an S VIDEO jack: For best picture quality, use an S VIDEO connection instead of the yellow video cable on your combined A/V cable.
Using an S VIDEO cable, connect the playback VCR's S VIDEO OUT jack to the recording VCR's S VIDEO IN jack. S VIDEO does not provide audio, so audio cables must still be connected to provide sound.
- You cannot record signals from equipment connected to the Y, P_B, P_R input.

Connecting a Satellite Receiver

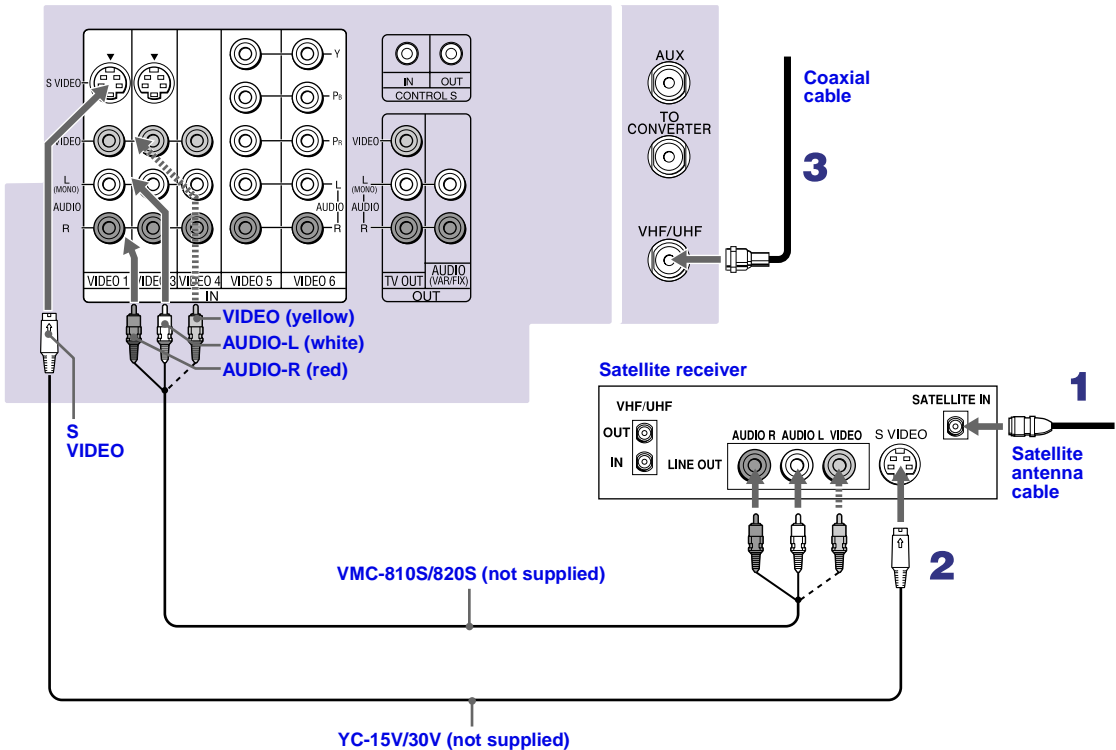
Disconnect all power sources before making any connections.

- 1 Connect the satellite antenna cable to the satellite receiver's SATELLITE IN jack.
- 2 Using AUDIO and S VIDEO cables, connect the satellite receiver's AUDIO and S VIDEO OUT jacks to the projection TV's AUDIO and S VIDEO IN jacks.
- 3 Connect a coaxial cable from your cable or antenna to the projection TV's VHF/UHF jack.



If your satellite receiver is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

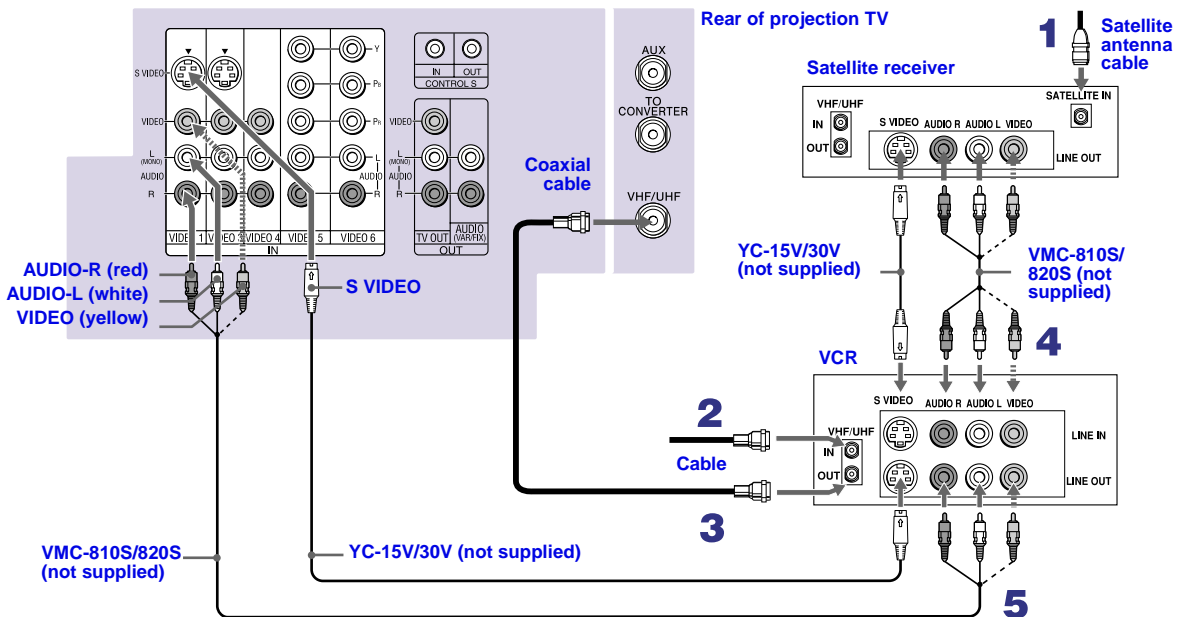
Rear of projection TV



Connecting a Satellite Receiver with a VCR

Disconnect all power sources before making any connections.

- 1 Connect the satellite antenna cable to the satellite receiver's SATELLITE IN jack.
- 2 Connect the CATV cable to the VCR's VHF/UHF IN jack.
- 3 Using a coaxial cable, connect the VCR's OUT jack to the projection TV's VHF/UHF jack.
- 4 Using AUDIO and S VIDEO cables, connect the satellite receiver's AUDIO and S VIDEO OUT jacks to the VCR's AUDIO and S VIDEO IN jacks.
- 5 Using AUDIO and S VIDEO cables, connect the VCR's AUDIO and S VIDEO OUT jacks to the TV's AUDIO and S VIDEO IN jacks.



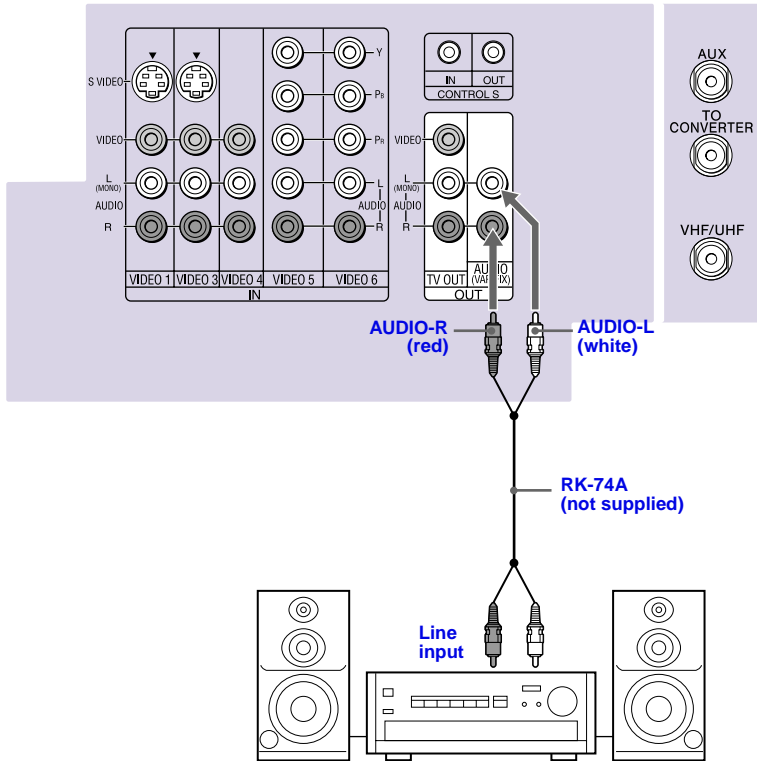
- Be sure your VCR's video input is set correctly. Consult your VCR's operating manual for instructions.
- Use TV/VIDEO to select
 - VIDEO 1 to watch satellite TV or the VCR. (Your VCR must be turned on)
 - VHF/UHF to watch cable TV.
- If your VCR or satellite receiver is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

Connecting an Audio Receiver

Disconnect all power sources before making any connections.

Using audio cables, connect the projection TV's AUDIO OUT (VAR/FIX) jacks to the audio receiver's audio LINE IN jacks.

Rear of projection TV




Connecting a DVD Player with Component Video Connectors

This is the preferred hookup to use if:

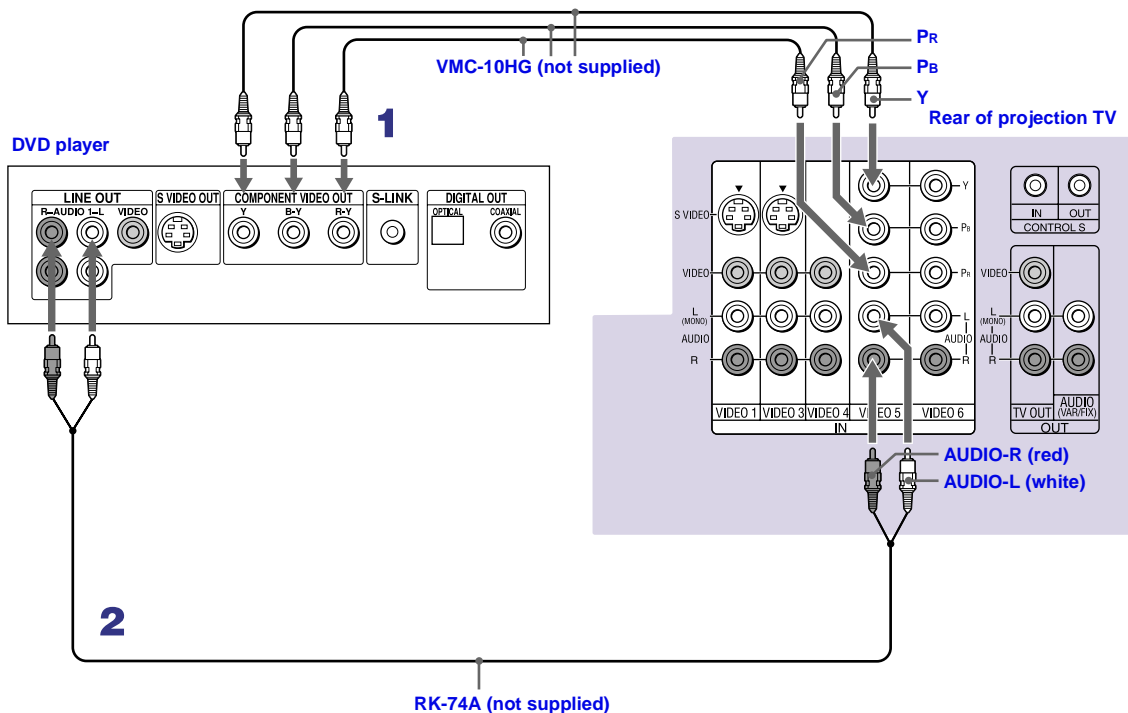
- ❑ Your DVD player has component (Y, PB, PR) jacks.

Disconnect all power sources before making any connections.

- 1 Using three separate component video cables, connect the DVD player's Y, PB and PR jacks to the Y, PB and PR jacks on the projection TV. Use the VIDEO IN 5 or 6 connections.

 The Y, PB and PR jacks on your DVD player are sometimes labeled Y, CB and CR, or Y, B-Y and R-Y. If so, connect the cables to like colors.

- 2 Using an audio cable, connect the DVD player's Audio OUT jacks to the projection TV's AUDIO IN jacks. Be sure to use the same row of inputs that you used for the video connection (VIDEO IN 5 or 6).




Connecting a DVD Player with A/V Connectors

Use this hookup if:

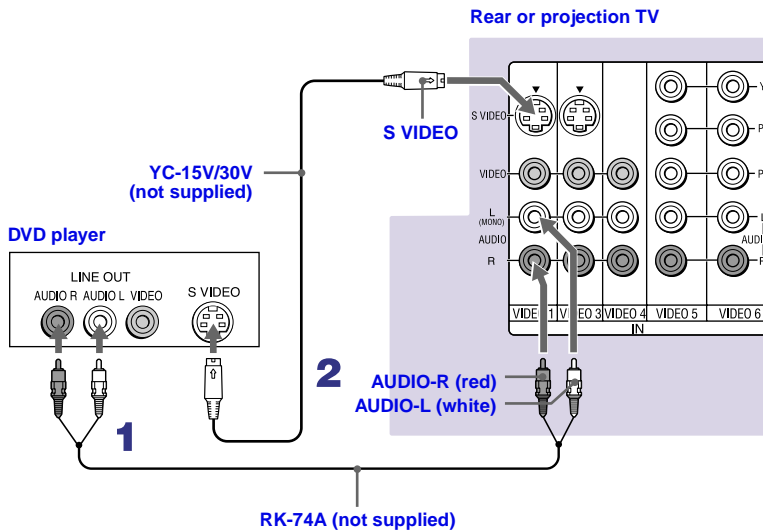
- ❑ Your DVD player does not have component (Y, PB, PR) jacks.




 If your DVD player has video component output connectors: for best picture quality use the connection described on page 26.

Disconnect all power sources before making any connections.

- 1 Using audio cables, connect the DVD player's Audio OUT jacks to the projection TV's AUDIO IN jacks.
- 2 Using an S VIDEO cable, connect the DVD player's S VIDEO jack to the projection TV's S VIDEO jack.



 Use TV/VIDEO on the remote control to switch between the VCR, DVD player and cable TV inputs.

Connecting a Digital TV Receiver



Be sure to read the Set-top box manual.

Disconnect all power sources before making any connections.

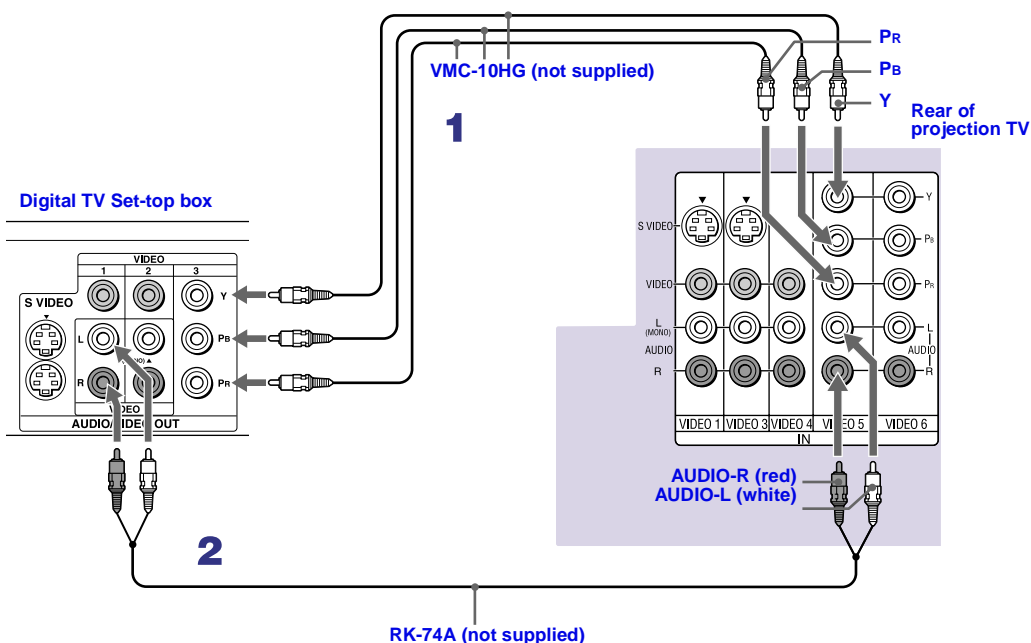
- 1 Using three separate component video cables, connect the Digital TV Set-top box's Y, P_B and P_R jacks to the projection TV.



The Y, P_B and P_R jacks do not provide audio, so audio cables must be connected to provide sound.

Component input (Y, P_B and P_R) is recommended for optimum picture quality. Component input is necessary to view 480p, 720p and 1080i formats. You may also use component video or S VIDEO connections.

- 2 Using an audio cable, connect the Digital TV Set-top box's Audio OUT jacks to the projection TV's AUDIO IN jacks.



You cannot record the signal from any equipment connected into the Y, P_B and P_R connectors.





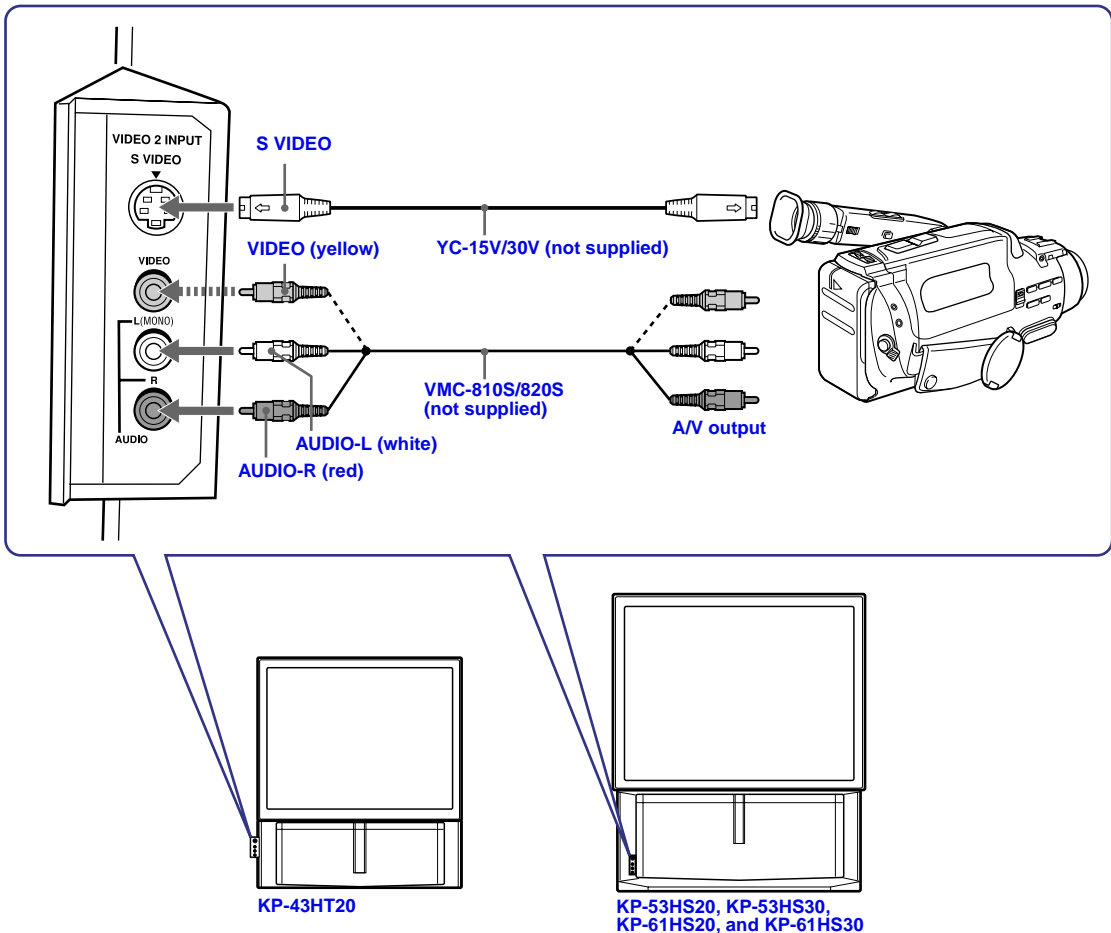
This projection TV is not compatible with digital TV receivers configured with RGB or VGA output connectors.

Connecting a Camcorder

For easy connection of the camcorder, the projection TV has front Audio and Video inputs (shown below). However, if you prefer, you can also connect the camcorder to the projection TV's rear Audio and Video IN jacks.

Using AUDIO and S VIDEO cables, connect the camcorder's Audio and S VIDEO OUT jacks to the projection TV's AUDIO and S VIDEO IN jacks.

-  If you have a mono camcorder, connect its left audio output to the projection TV's AUDIO L jack.
-  If your camcorder is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.



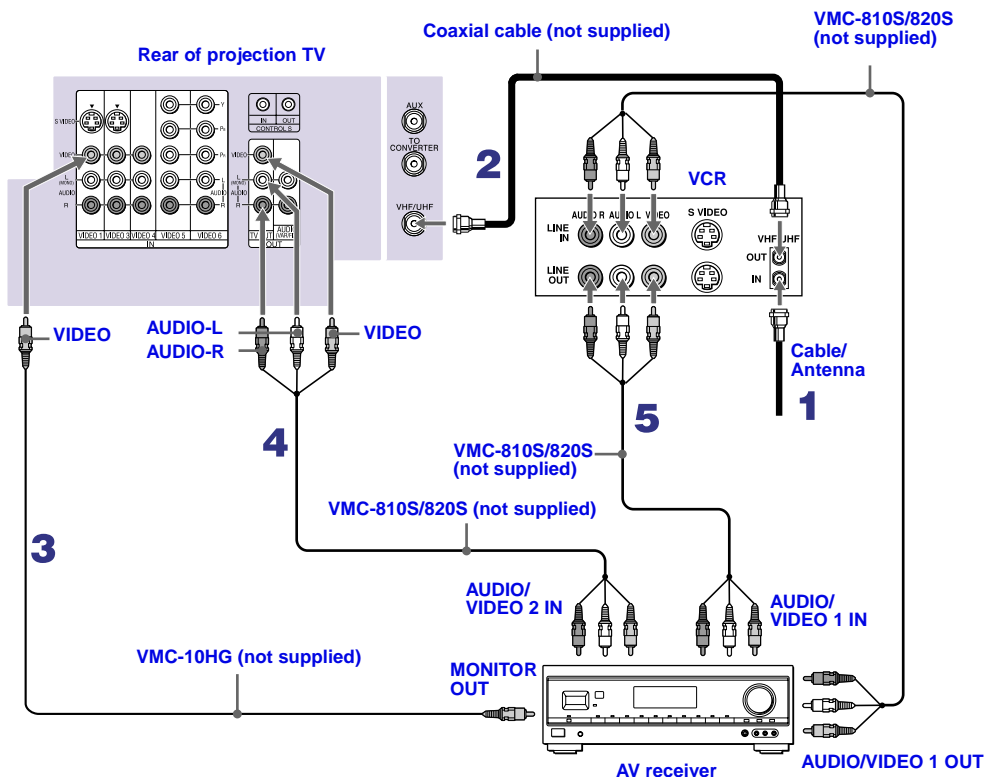
Connecting an AV Receiver

For greater control of all audio and video equipment, connect an AV receiver.

 Change "Video Label" for the VIDEO 1 input to "Receiver." (see page 64)

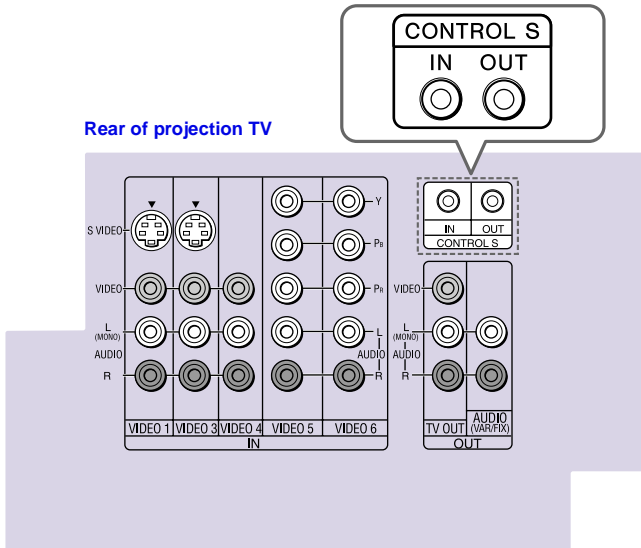
Disconnect all power sources before making any connections.

- 1 Connect the coaxial cable from the incoming cable connection or antenna to IN on the VCR.
- 2 Using a coaxial cable, connect OUT on the VCR to VHF/UHF on the projection TV.
- 3 Using a VIDEO cable, connect VIDEO of VIDEO 1 IN on the projection TV to MONITOR OUT on the AV receiver.
- 4 Using an AUDIO/VIDEO cable, connect TV OUT on the projection TV to AUDIO/VIDEO 2 IN on the AV receiver.
- 5 Using an AUDIO/VIDEO cable, connect the video equipment to the AV receiver.
- 6 Select the Setup menu and set "Video Label" to "Receiver" to fix your TV's input to AV receiver. (see "Video Label" on page 64)



Using the CONTROL S Feature

CONTROL S allows you to control your projection TV system and other Sony equipment with one remote control. In addition to allowing you to control multiple devices with one remote control, the CONTROL S feature allows you to always point your remote control at your projection TV, instead of having to point it at the other equipment, which might be hidden or out of direct line of sight.




Setting Up the Projection TV Automatically

After you finish connecting your projection TV, you can run Auto Setup to set up your channels. The Auto Setup screen appears when you turn your projection TV on for the first time after installing it. If you do not want to set up the channels at this time, you can do it later by using the Auto Program feature in the Channel menu. (see page 53)

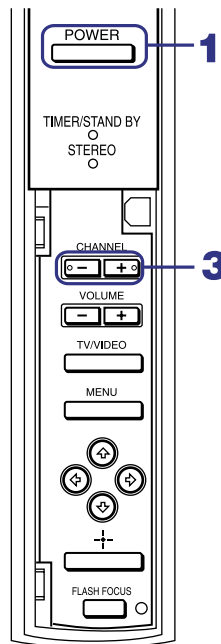


The Auto Setup feature does not apply for installations that use a cable box for all channel selection.

Using Auto Setup

- 1 Press POWER on the front panel of your projection TV or on the remote control to turn on the projection TV.
- 2 Press the TV (FUNCTION) button on your remote control. Red light will briefly appear.
- 3 Press CH+ on your projection TV to run Auto Setup, or press CH- to exit. If you use the channel buttons on your remote control, be sure to use the main set of buttons ()

Projection TV front panel




You can run Auto Program by selecting it in the Channel menu, as described on page 53.

Adjusting the Convergence Automatically – FLASH FOCUS™ –

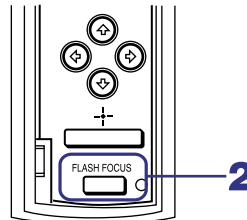
The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs.

Before you use your projection TV, be sure to adjust the convergence.

The FLASH FOCUS feature allows you to adjust the convergence automatically.

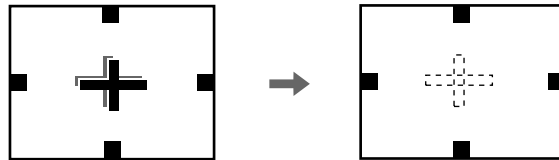
 It is recommended to perform FLASH FOCUS about 30 minutes after the projection TV is first turned on.

Projection TV
front panel






- 1 Receive a TV or cable TV program.
- 2 Press FLASH FOCUS.

The cross pattern appears and FLASH FOCUS begins to work. The adjustment is completed when the cross pattern becomes white and will come back to the program you are watching.



To obtain an optimum convergence for Digital TV programs

The optimum convergence alignment varies with digital TV formats. Whenever you find that the picture blurs, press FLASH FOCUS.

-  You cannot perform any other functions until FLASH FOCUS has completed its cycle.
-  If you perform any other operation while FLASH FOCUS is in progress, FLASH FOCUS operation is canceled.
-  Unshielded speakers or other metallic objects can cause picture distortion if placed close to the projection TV.

Using the Features

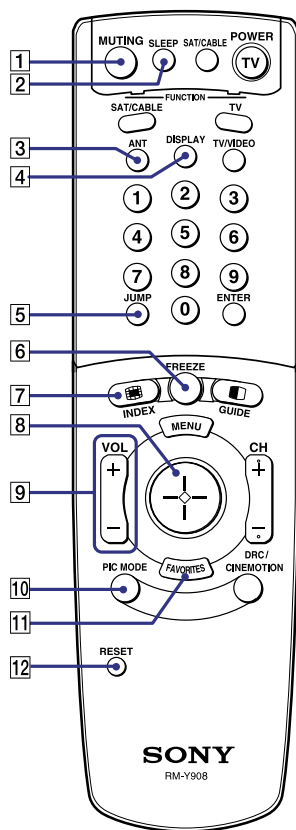
Using the Remote Control

The following table describes the buttons on the remote control that are for more advanced functions.





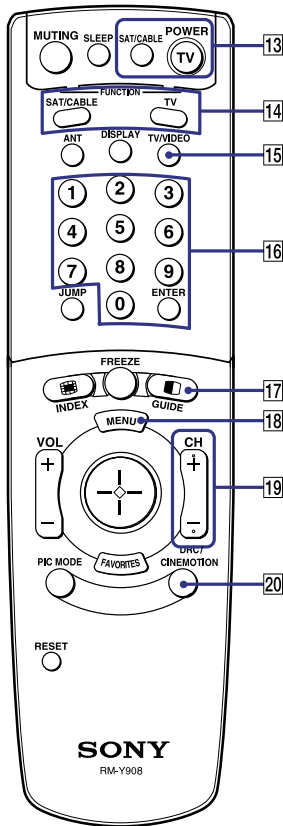
Main Power button must be turned ON to activate the remote control.


Button Descriptions



Outside Panel

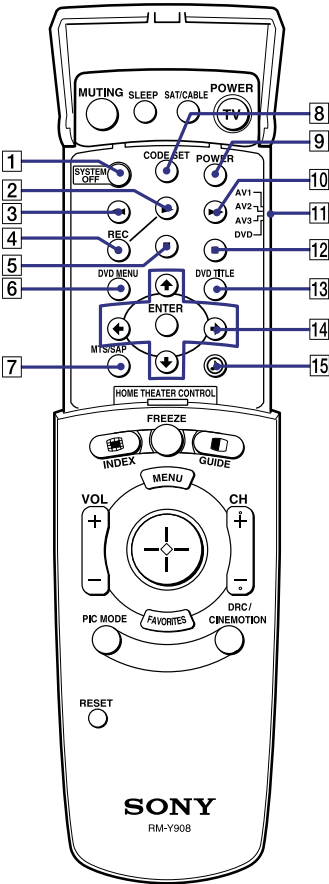
| Button | Description |
|--|--|
| 1 MUTING | Press to mute the sound. Press again or press VOL + to restore the sound. |
| 2 SLEEP | Press repeatedly until the projection TV displays the time in minutes (15, 30, 45, 60, or 90) that you want the projection TV to remain on before shutting off automatically. Cancel by pressing until SLEEP OFF appears. While Sleep feature is set, press once to view remaining time. |
| 3 ANT | Changes between the VHF/UHF input to the AUX input. |
| 4 DISPLAY | Press once to display the current time and channel label (if set) and channel number. Press again to turn Display off. See page 62 for details on setting the time. |
| 5 JUMP | Press to jump back and forth between two channels. The projection TV alternates between the current channel and the last channel that was selected. |
| 6 FREEZE | Freezes the window picture. Press again to restore the picture. |
| 7  INDEX | Press to enter the Channel Index mode. You can view and select from twelve channels without leaving the current one. |
| 8  | Joystick allows for movement of the on-screen cursor. Pressing down on the center of the joystick selects the item. |
| 9 VOL +/- | Adjusts the volume. |
| 10 PIC MODE | Press repeatedly to step through the available video picture modes: Vivid, Standard, Movie and Pro. Also available in the Video menu. For details, see "Selecting Video Options" on page 48. |
| 11 FAVORITES | Displays the Favorite Channels list. For details, see "Using Favorite Channels" on page 40. |
| 12 RESET | Press when in a menu to reset the settings to the factory defaults. |



| Button | Description |
|--|---|
| 13 POWER buttons (GREEN) | Turn on and off the projection TV and other audio/video equipment you have programmed into the remote control. For instructions, see “Programming the Remote Control” on page 65. |
| 14 FUNCTION buttons | Select the equipment (TV, SAT/CABLE) that you want to operate. The indicator lights up momentarily when pushed to show which device the remote control is operating. |
| 15 TV/VIDEO | Cycles through the video equipment connected to your projection TV’s video inputs: TV, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4, VIDEO 5 and VIDEO 6. |
| 16 0 – 9 and ENTER | Press 0 - 9 to select a channel, the channel changes after 2 seconds. Press ENTER to select immediately. |
| 17  | Turns on/off Twin View. For details, see “Using Twin View™” on page 41. |
| GUIDE | Displays the program guide of your satellite. |
| 18 MENU | Press to display the projection TV on-screen menu. Press again to exit from the menus. |
| 19 CH +/- | Scan through channels. |
| 20 DRC/ CINEMOTION | Press repeatedly to step through the available high-resolution picture modes: Interlaced, Progressive and CineMotion. For details, see “Using the Video Menu” on page 48. |



To scan rapidly through the channels, press and hold down CH+ or CH-.



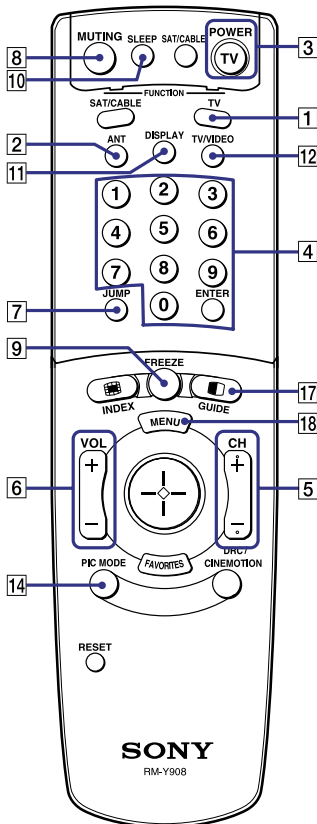
Inside Panel

| Button | Description |
|---------------|---|
| 1 SYSTEM OFF | Press to turn off the projection TV and all equipment connected with S-Link. |
| 2 | Play |
| 3 | Rewind |
| 4 REC | Record |
| 5 | Stop |
| 6 DVD MENU | Displays the DVD menu. |
| 7 MTS/SAP | Press to scroll through the Multi-channel TV Sound (MTS) options: Stereo, Auto SAP, and Mono. |
| 8 CODE SET | Used for programming the remote control to operate non-Sony video equipment. For details, see "Programming the Remote Control" on page 65. |
| 9 POWER | Press to turn on the DVD/VCR player you have programmed into the remote control. For instructions, see "Programming the Remote Control" on page 65. |
| 10 | Fast-forward |
| 11 | Use to switch control for connected video equipment. You can program one video source for each switch position. For details, see "Programming the Remote Control" on page 65. |
| 12 | Pause (Press again to resume normal playback) |
| 13 DVD TITLE | Displays the DVD title. |
| 14 and ENTER | Use to operate the DVD menu. |
| 15 | Press to select an audio option: Steady Sound ON or OFF. |

Watching the TV

Many TV features can be accessed directly through the remote control. The following will explain the function of some buttons found on your remote control.

Buttons for Projection TV Operations



1 TV (FUNCTION)

Activates the remote control for use with the projection TV.

2 ANT— (AUX input)

Press to change between the VHF/UHF input and the AUX input. (for detailed connection information, see “Cable and Antenna” on page 16 or “Cable Box Connections” on page 17)

3 TV (POWER)

Turns the projection TV on and off. If a video input indication (e.g., VIDEO 1, VIDEO 2) appears on the screen, press TV/VIDEO or CH +/– until a channel number appears.

4 0-9 and ENTER

Use for direct channel selection. Press 0-9 to select a channel (for example, to select channel 10, press 1 and 0). The channel will change after 2 seconds, or you can press ENTER for immediate selection.

5 CH +/-

Press to scan through the channels (+ up or – down).

6 VOL +/-

Press to adjust the volume (+ up or – down).

7 JUMP

Press to alternate or jump back and forth between two channels. The projection TV will jump between the current channel and the last channel selected.

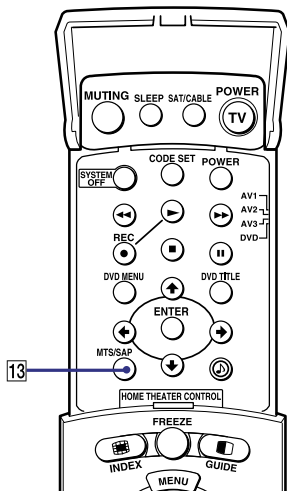
8 MUTING

Press to mute the sound. “MUTING” will appear on the screen and will dim three seconds later. To restore sound, press again or press VOL +.

9 FREEZE — (yellow labeled button)

This is useful when you need to copy down information that appears on the TV’s screen. (see “Using the Freeze Function” on page 44)

(Continued)



10 SLEEP

Press repeatedly until the projection TV displays the approximate time in minutes (15, 30, 45, 60, or 90) that you want the projection TV to remain on before shutting off automatically.

Cancel by pressing SLEEP until "SLEEP OFF" appears.

11 DISPLAY

Press to display the channel number, current time and channel label (if set).

To turn the display off, press DISPLAY again.

12 TV/VIDEO

Press repeatedly to scroll through available video inputs: TV, VIDEO 1, VIDEO 2, VIDEO 3, VIDEO 4, VIDEO 5 and VIDEO 6.

If you select Skip as a Video Label in the Setup menu, your projection TV will skip the video input you selected. (see "Video Label" on page 64)

13 MTS/SAP

Press to scroll through the Multi-channel TV Sound (MTS) options. (see "MTS" on page 50)

14 PIC MODE

Press PIC MODE repeatedly to directly choose one of five different video modes that best suits the program you are watching.

Vivid: Select for enhanced picture contrast and sharpness.

Standard: Select to display a standard picture for normal viewing environments.

Movie: Select to display a finely detailed picture for low light environments.

Pro (Professional): Select to display a picture with minimum enhancements.

When you select each mode, you can also adjust the picture quality (such as Brightness, Color, etc.) to suit your taste. For details, see "Mode" on page 48.

Watching the Digital TV

When you have connected the DTV receiver, you can enjoy digital TV programs. This projection TV is capable of receiving the 1080i, 720p, 480p and 480i digital TV formats.



This projection TV is not capable of displaying a native 720p format signal. When the 720p format signal is received, it is converted into a 480p format signal.

To view a digital TV program

- 1** Connect the DTV receiver to VIDEO 5 or 6 IN on the projection TV. (for details, see page 28)
- 2** Press TV/VIDEO to select VIDEO 5 or 6.
- 3** Select a digital channel on the DTV receiver. For details, see the Operating Manual of the DTV receiver.
- 4** Adjust the volume on this projection TV as necessary.



The optimum convergence alignment varies with digital TV formats. Whenever you find that the picture blurs, press FLASH FOCUS. (for details, see page 33)

Using Favorite Channels

The Favorite Channel feature lets you select programs from a list of favorite channels that you preset.

To display a list of your favorite channels:



Your Favorite Channel options can be set automatically or manually. The factory setting for Favorite Channel is Auto.

When Favorite Channel is set to Auto, the last eight channels selected with 0-9 buttons will be set as Favorite Channel options. If you want to input your own selections as Favorite Channel settings, see “Favorite Channel” on page 52.

1 Press FAVORITES.

The Favorite Channel options appear.



Preview window


2 Move the joystick up or down to highlight the channel you want to watch. The program on that channel appears in the preview window. Press to select.

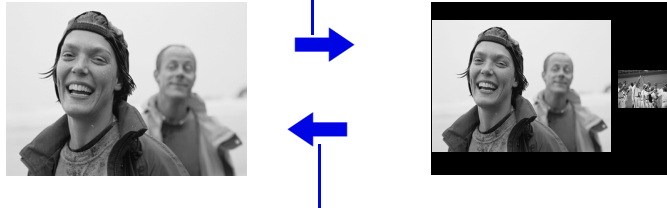
Using Twin View™

Twin View enables you to watch two programs at the same time. You can also change the size of both the left and right pictures.



Displaying Twin Pictures

To display twin pictures

- 1 Make sure your projection TV is tuned to a working channel.
- 2 Press .



To cancel twin pictures

- Press  again (or press .

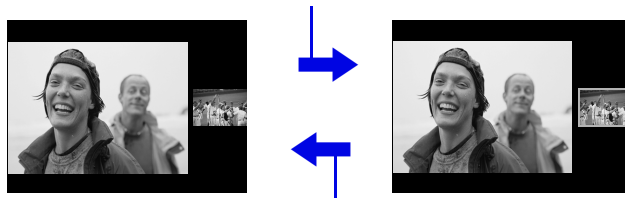
Activating the Picture

Although two pictures appear on the screen at the same time, only one picture is active. Change the picture size by using the joystick. For an active picture, you can:

- Change channels.
- Adjust the volume.
- Switch the input sources from VHF/UHF to cable by pressing ANT or TV/VIDEO to switch the video input.
- Change the picture size by pressing the joystick up or down.

To activate the right picture






- Move the joystick to the right.



To activate the left picture

- Move the joystick to the left.

(Continued)

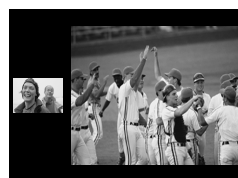
-  When you adjust the twin screen sizes, the projection TV memorizes the change. The next time you use the Twin View feature with 480i or 480p format input source, the memorized sizes appear.
-  When viewing an enhanced 16:9 picture, the aspect ratio changes to 4:3 in Twin View. The picture will be reformatted to that aspect ratio.
-  If viewing a 720p or 1080i format input source, the aspect ratio will maintain the original 16:9 aspect ratio.
-  Hookups that affect your ability to use Twin View:
 - If you are viewing all channels through the cable box, the Twin View feature will not work. The cable box only unscrambles one signal at a time, so the right picture will be the same as the left picture.
 - You can watch a scrambled cable channel and another video source. Be sure your DVD player, VCR or satellite receiver are connected to one of the VIDEO IN 1-6 and AUX inputs on the rear of the projection TV. Pictures from equipment connected to VIDEO 5, 6 and AUX will only appear in the left picture, not in the right.
-  The active picture is highlighted in cyan.

Changing the Picture Size

The zoom feature lets you change the size of the left and right pictures.

To enlarge the left picture (reduce the right)

- 1 Move the joystick left to activate the left picture (if not already activated).
- 2 Move the joystick up to enlarge the picture and move the joystick down to reduce the picture.



To enlarge the right picture (reduce the left)

- 1 Move the joystick right to activate the right picture (if not already activated).
- 2 Move the joystick up to enlarge the picture and move the joystick down to reduce the picture.



When you adjust the twin screen sizes, the projection TV memorizes the change. The next time you use the Twin View function, the memorized sizes appear.

Using the Freeze Function

The FREEZE button allows you to temporarily capture a program's picture. You can use this feature to write down information such as phone numbers, recipes, etc.

To use the Freeze function

- 1 When the program information you want to capture is displayed, press FREEZE.
- 2 The projection TV switches to Twin View mode and displays the "frozen" picture on the right, while the current program continues on the left.



- 3 To cancel and return to normal viewing, press FREEZE.




Freeze feature is not available if you are already in Twin View™ mode.

Using Channel Index

Channel Index allows you to display multiple channels and select one directly.

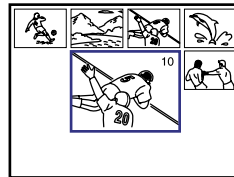
The channels used for Channel Index will come directly from the projection TV's list of receivable channels (those set during "Auto Program" on page 53)

 Channel Index will not function when Parental Lock is activated. (See "Using the Parent Menu" on page 54.)


To use the Channel Index function

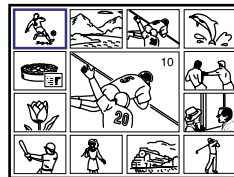
1 Press .

The current channel will be reduced in size and displayed in the center of the screen in normal motion picture format. The first twelve receivable channels will appear one after another, clockwise, around the center picture. These small pictures are updated in intervals of one second. The channel number and channel caption (if set) on the second and later appearances will dim.

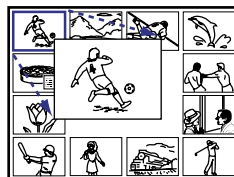


A cyan-colored frame will appear to indicate current channel selection.

2 Move the joystick in any direction to move the cyan frame to the channel that you wish to view, and press .



The selected channel will zoom in and move to the center, and the sound of that channel will be heard.



(Continued)

For the center picture you can:

- ❑ Change the channel by pressing 0-9 and ENTER.
- ❑ Switch the input sources from VHF/UHF to cable by pressing ANT or to the video input by pressing TV/VIDEO, without changing the surrounding channels.



Sound will only be heard from the center picture.



If one of the pictures received through Channel Index is snowy, the entire screen may become unstable. In this case, erase the snowy channel. (see "Channel Skip/Add" on page 53)



If you leave the Channel Index screen displayed for an hour without any additional operation, Channel Index is canceled and the normal picture reappears.

3 If you wish to view another channel, repeat step 2.

To view another twelve channels, press CH+.

To view the previous twelve, press CH-.


To view the normal picture of the selected channel, proceed to step 4.

4 Press .

The center picture will be enlarged for normal viewing.

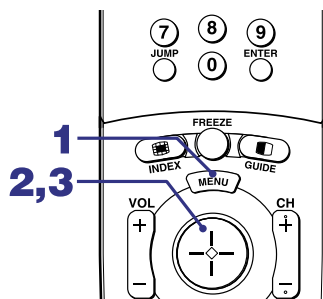


To cancel Channel Index

- ❑ Press  again to resume normal viewing.

Using the Menus

Overview



Opening and choosing a menu:

- 1 Press MENU to display the menu screen.
- 2 Move the joystick to the desired menu icon and press to select it.
- 3 Use the joystick to scroll through the features.
- 4 See the specific menu page for instructions on moving through the menu.

The menu gives you access to the following features:

| <i>Menu Icon</i> | <i>Description</i> | <i>Page</i> |
|------------------|---|-------------|
| | Allows you to make adjustments to your picture settings. It also allows you to customize the Picture Mode based on the type of program you are viewing. | 48 |
| | Offers enhanced audio options such as listening to second audio programming (SAP), or customizing the Effect of the sound on your projection TV. | 50 |
| | Allows you to set up a Favorite Channel list, run the Auto Program function, and more. | 52 |
| | Lets you control the viewing of programs based on their ratings. | 54 |
| | Lets you set the clock on your projection TV and allows you to program your projection TV for scheduled viewing using the Timers. | 62 |
| | Provides several options for setting up your channels, labeling your Video inputs, and selecting the language of the on-screen menus. | 63 |

To end a menu session:

Press MENU again.





To end one menu session and move to another:

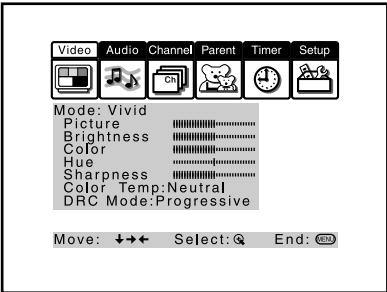
Press the joystick to return to the menu icons. Move the joystick to choose the next menu icon and press to select it.



Using the Video Menu

To select the Video Menu


- 1 Press MENU.
- 2 Move the joystick to the Video icon  and press .
- 3 Use the joystick to scroll through the features.
- 4 Press  to select a feature. That feature's adjustment appears.
- 5 Use the joystick to make the desired adjustments.
- 6 Press  to select/set.
- 7 Press MENU to exit the menu screen.




To restore the factory default settings for Picture, Brightness, Color, Hue, Sharpness and Color Temp

- ☐ Press RESET on the remote control when in the Video menu.

Selecting Video Options

 To quickly and easily change from one Video Mode to another, use the PIC MODE on the remote control.

The Video menu includes the following options.





| Option | Description | |
|---|---|---|
| Mode <i>Customized picture viewing</i> | Vivid | Select for enhanced picture contrast and sharpness. |
| | Standard | Recommended for Normal viewing conditions. |
| | Movie | Select for soft, film like, picture. |
| | Pro | Select for professional monitor like appearance. |
| |  You can alter the Video menu settings (Picture, Brightness, Color, etc.) for each Mode. | |
| Picture | Adjust to increase picture contrast and deepen the color or decrease picture contrast and soften the color. | |
| Brightness | Adjust to brighten or darken the picture. | |
| Color | Adjust to increase or decrease color intensity. | |
| Hue | Adjust to increase or decrease the green tones. | |
| Sharpness | Adjust to sharpen or soften the picture. | |
| Color Temp <i>White intensity adjustment</i> | Choose from three color temperatures: | |
| | Cool | Select to give the white colors a blue tint. |
| | Neutral | Select to give the white colors a neutral tint. |
| | Warm | Select to give the white colors a red tint (NTSC-Standard). |

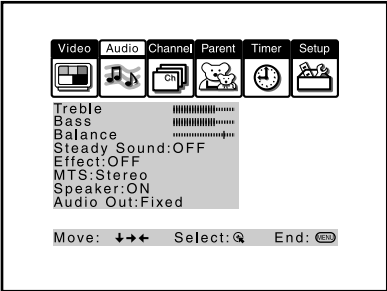
| Option | Description | |
|--------------------------|---|--|
| DRC Mode | Creates a high-resolution picture with 4x density, for high quality sources (i.e., DVD player, Satellite receiver). | |
| Digital Reality Creation | Select from Interlaced, Progressive and CineMotion. | |
| | Interlaced | Recommended for moving pictures. |
| | Progressive | Recommended for still images and text. |
| | CineMotion | Recommended for 24 frame-per-second films. |



Using the Audio Menu

To select the Audio Menu

- 1 Press MENU.
- 2 Move the joystick to the Audio icon  and press .
- 3 Use the joystick to scroll through the options.
- 4 Press  to select an option. That option's settings appear.
- 5 Use the joystick to scroll through the settings.
- 6 Press  to select the desired setting.
- 7 Press MENU to exit the menu screen.



To restore the factory default settings for Treble, Bass and Balance

- ❑ Press RESET on the remote control when in the Audio menu.

Selecting Audio Options

The Audio menu includes the following options:





| Option | Description | |
|---|---|---|
| Treble | Adjust to increase or decrease higher-pitched sounds. | |
| Bass | Adjust to increase or decrease lower-pitched sounds. | |
| Balance | Adjust to emphasize left or right speaker balance. | |
| Steady Sound | ON | Select to stabilize the volume. |
| | OFF | Select to turn off Steady Sound. |
| Effect | TruSurround | Select for surround sound (for stereo programs only). |
| | Simulated | Adds a surround-like effect to mono programs. |
| | OFF | Normal stereo or mono reception. |
| MTS <i>Enjoy stereo, bilingual and mono programs</i> | Stereo | Select for stereo reception when viewing a program broadcast in stereo. |
| | Auto-SAP | Select to automatically switch the projection TV to second audio programs when a signal is received. (If no SAP signal is present, the projection TV remains in Stereo mode.) |
| | Mono | Select for mono reception. (Use to reduce noise during weak stereo broadcasts.) |

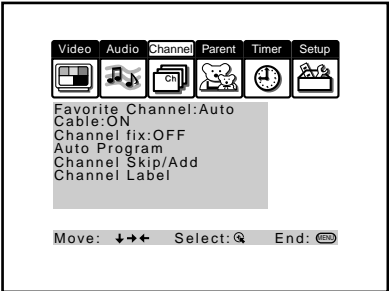
| Option | Description | |
|--|-------------|--|
| Speaker | ON | Select to turn on the projection TV speakers. |
| | OFF | Select to turn off the projection TV speakers and listen to the projection TV's sound only through your external audio system speakers. |
| Audio Out <i>Easy control of volume adjustments</i> | Variable | The projection TV's speakers are turned off, but the volume output from your audio system can still be controlled by the projection TV's remote control. |
| | Fixed | The projection TV's speakers are turned off and the volume, bass and treble output of the projection TV is fixed. Use your audio receiver's volume control to adjust the volume through your audio system. |



Using the Channel Menu




To select the Channel Menu



- 1 Press MENU.
- 2 Move the joystick to the Channel icon  and press .
- 3 Use the joystick to scroll through the features.
- 4 Press  to select a feature. That feature's options appear.
- 5 Use the joystick to scroll through the options.
- 6 Press  to select the desired option.
- 7 Press MENU to exit the menu screen.



Selecting Channel Options

The Channel menu includes the following options:

| | | <i>Option</i> | <i>Description</i> |
|------------------|--------|---|---|
| Favorite Channel | Auto | | Select if you want Favorite Channel options to be set automatically to the last eight channels selected with the 0-9 buttons. |
| | Manual | | Select if you want to input your own selections as Favorite Channel options. 1 Press  to select a favorite channel number. 2 Use the joystick to scroll through the channels until you find the channel you want to add to your favorites. 3 Press  to select it. |
| | | | |
| Cable | ON | | Select if you are receiving cable channels with a CATV cable. |
| | OFF | | Select if you are using an antenna. |
| | |  | You should run Auto Program after changing the Cable setting. |

| Option | Description | |
|--|---|--|
| Channel Fix <i>Useful when you have a cable box or satellite receiver connected</i> | 2-6 | “Fix” your projection TV’s channel setting to 3 or 4 and use the cable box, VCR or satellite receiver to change channels. Select one of these settings if you have connected the device to the VHF/UHF jack. |
| | AUX 2-6 | Same as 2-6, except you select one of these settings if you have connected the device to the AUX jack. (see page 15) |
| | VIDEO 1 | Use when connecting an AV receiver to control external video sources. TV output should be connected through the AV receiver. |
| Auto Program | Automatically programs the projection TV for all receivable channels. | |
| Channel Skip/Add | Removes and adds viewable channels. 1 Use the joystick to scroll through the channels until you find the channel you want to skip/add. 2 Press  to select it. 3 Press the joystick up or down to toggle between “Add” and “Skip.” 4 Press  to select. | |
| Channel Label | Label up to 20 channels with their station call letters. | |



Using the Parent Menu

The Parent menu allows you to set up the TV to block programs according to their content and rating levels.

These ratings are assigned by a federal rating board. Not all programs are rated. Using the Parental Lock blocks programs with a specific rating, but it does not block an entire channel.





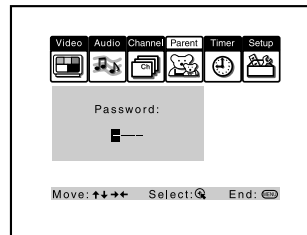
Channel Index will not function when Parental Lock is activated.

Using the Parent Menu

To select the rating

First, set a password, then select the country you reside in (U.S.A. or Canada) and your desired rating.

- 1 Press MENU.
- 2 Move the joystick to the Parent icon  and press .




- 3 Use the 0-9 buttons on the remote control to enter your four-digit password.
- 4 Confirm your password by entering it again. Your password is stored and the Parent menu options appear.




You need the password entered here for any future access into the Parent menu. If you lose your password, see “Lost password” on page 71.




If you want to change the password, see page 56.

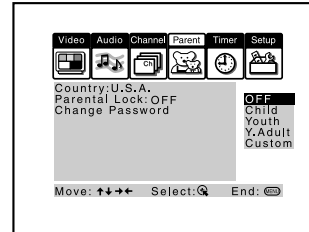
- 5 Make sure that “Country” is selected, and press .




- 6 Move the joystick up or down to select U.S.A. or Canada according to the country you reside in, and press .

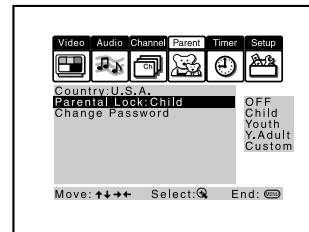


- 7 Move the joystick down to select “Parental Lock”, and press .




- 8 Move the joystick up or down to select a desired rating, and press .


If you select Child, Youth, Young Adult or Custom, the Parental Control is activated automatically.



If you want to select the ratings from Custom, see “Using Custom Rating Options” on page 57.

- 9 Press MENU to exit the menu screen.

 If you are not familiar with the Parental Guideline rating system, you should select Child, Youth, or Young Adult to help simplify the rating selection. To set more restrictive ratings, select Custom.

 For descriptions of Child, Youth, and Young Adult ratings, see pages 60 and 61.


The Parent menu includes the following options.

| Option | Description | |
|---|---|---|
| Parental Lock | OFF | Parental lock is off. No programs are blocked from viewing. |
| <i>Turn ratings on/off and select a rating system</i> | Child | Maximum ratings permitted are: <input type="checkbox"/> US: TV-Y, TV-G, G <input type="checkbox"/> Canada: TV-Y, C, G |
| | Youth | Maximum ratings permitted are: <input type="checkbox"/> US: TV-PG, PG <input type="checkbox"/> Canada: TV-PG, PG, 8 ans+ |
| | Young Adult | Maximum ratings permitted are: <input type="checkbox"/> US: TV-14, PG-13 <input type="checkbox"/> Canada: TV-14, 14+, 13 ans+ |
| | Custom | Select to set ratings manually. <input type="checkbox"/> US: See page 60 for details. <input type="checkbox"/> Canada: See page 61 for details. |
| Change Password | For changing your password. (see below) | |

To deactivate the Parental Control feature

- ☐ Set Parental Lock to OFF when in the Parent menu.

To change the password

- 1 Select Change Password option when in the Parent menu using the joystick, and press .
- 2 Enter a new four-digit password using the 0-9 buttons.
- 3 Confirm the new password by entering it again.
- 4 Press MENU to exit the menu screen.

Viewing Blocked Programs


You can view a blocked program by entering the password.

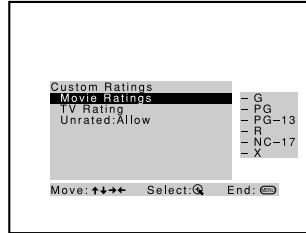
- 1 Press ENTER when tuned to a blocked program.
- 2 Enter your password using the 0-9 buttons.


Parental Control will be canceled temporarily until you turn your projection TV off.

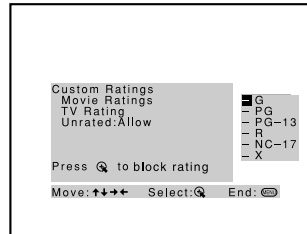
Using Custom Rating Options


If you want to select the ratings to be blocked from Custom, follow the procedure below.


- 1 Perform the steps 1 to 7 in “To select the rating” on page 54 to display the Parental Lock options.
- 2 Move the joystick up or down to select “Custom,” and press .

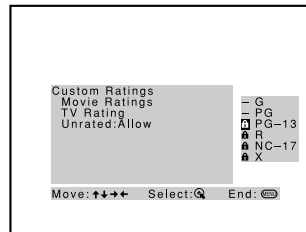




- 3 Make sure that “Movie Ratings” is selected, and press .




- 4 Move the joystick up or down to select the rating to be blocked, and press .

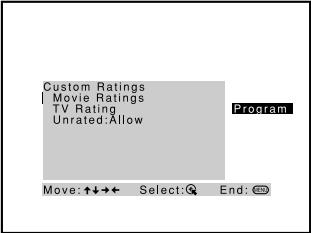
The  indicator automatically appears beside the selected rating and all “higher” ratings, indicating that the programs that match the ratings will be blocked.



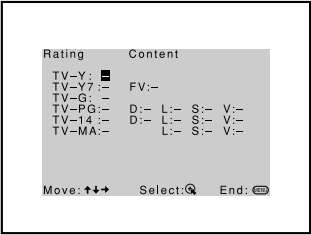
To unblock a rating, select it by moving the joystick up or down, then press . The indicator  changes into “-” and all “lower” ratings are unblocked.


(Continued)


- 5 Move the joystick left, then down, to select “TV Rating” or “Program,” and press .

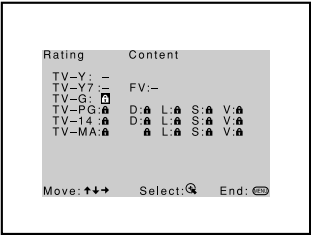




- 6 The “TV Rating” setting menu appears.




- 7 Move the joystick up or down to select the rating to be blocked, and press .

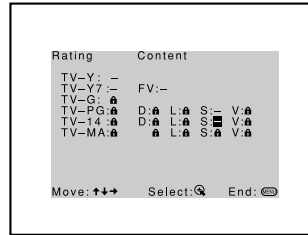
The  indicator automatically appears beside the selected rating and all “higher” ratings, indicating that the programs that match the ratings will be blocked.





To unblock a rating, select it by moving the joystick up or down, then press . The indicator  changes into “-” and all “lower” ratings are unblocked.

Some TV ratings have additional content ratings called “extenders.” The extenders are defined as follows: D (sexually suggestive Dialog), FV (Fantasy Violence), L (coarse Language), S (Sexual situations) and V (Violence). By setting the extenders, you can define additional viewing limits. All of the extenders included in the selected ratings will be blocked. If you wish to allow any of them to be viewed, go to step 8.

- 8 Move the joystick left or right to select the extender to be viewed, and press .




“-” appears beside the selected extender, indicating that the programs that match the extender can be viewed.


If you press  again,  is displayed to show that the programs that match the extender will be blocked again.

- 9 Repeat step 8 for other extenders.

All programs that match the ratings you select and higher, except for the extenders that were canceled, will be blocked.

- 10 Press MENU to exit the menu screen.


 To ensure maximum blocking capability, the age-based ratings should be blocked.

 If you choose to block unrated TV programs, please be aware that the following programs may be blocked: emergency broadcasts, political programs, sports, news, public service announcements, religious programs and weather.

US custom rating options

If you selected U.S.A. as the country of residence on page 54, the Custom Rating Menu includes the following options. (If you selected Canada, see page 61.)

| Option | Description | |
|---|-----------------------|---|
| Movie Rating | G | All children and General Audience. |
| | PG | Parental Guidance suggested. |
| | PG-13 | Parental Guidance for children under 13. |
| | R | Restricted viewing, parental guidance is suggested for children under 17. |
| | NC-17 and X | No one 17 and under allowed. |
| TV Rating | Age-Based Options | |
| <i>Block programs by their rating, content or both</i> | TV-Y | All children. |
| | TV-Y7 | Directed to older children. |
| | TV-G | General Audience. |
| | TV-PG | Parental Guidance suggested. |
| | TV-14 | Parents Strongly cautioned. |
| | TV-MA | Mature Audience only. |
| | Content-Based Options | |
| | FV | Fantasy Violence. |
| | D | Suggestive Dialogue. |
| Unrated | L | Strong Language. |
| | S | Sexual situations. |
| | V | Violence. |
| | Block | Blocks all programs and movies that are broadcast without a rating. |
| | | Allow |
| <i>Block programs or movies that are broadcast without a rating</i> | | |

 The content ratings will increase depending on the level of the age-based rating. For example, a program with a TV-PG V (Violence) rating may contain moderate violence, while a TV-14 V (Violence) rating may contain more intense violence.

Canadian custom rating options



If you selected Canada as the country of residence on page 54, the Custom Rating Menu includes the following options. (If you selected U.S.A., see page 60.)

| Option | Description |
|----------------|--|
| English Rating | C All children. |
| | C8+ Children 8 years and older. |
| | G General programming. |
| | PG Parental Guidance. |
| | 14+ Viewers 14 and older. |
| | 18+ Adult programming. |
| French Rating | G General programming. |
| | 8 ans+ Not recommended for young children. |
| | 13 ans+ Not recommended for ages under 13. |
| | 16 ans+ Not recommended for ages under 16. |
| | 18 ans+ Programming restricted to adults. |
| USA Rating | See “TV Rating” on page 60 for details. |





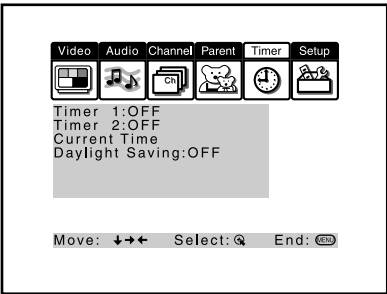
Using the Timer Menu

To select the Timer menu

- 1 Press MENU.
- 2 Move the joystick to the Timer icon  and press .



To set the Current Time

- 1 Use the joystick to select “Current Time”, then press .
- 2 If it is currently Daylight Saving Time, be sure to set the mode to “ON” first.
- 3 Use the joystick to enter the correct time, then press .
- 4 Press MENU to exit the menu screen.



To set the Timer

Before setting the timer, be sure to set your projection TV’s clock to the current time and Daylight Saving Mode.

- 1 Move the joystick to “Timer 1” or “Timer 2”, then press .
- 2 Use the joystick to enter your day, time and channel preferences, then press .
- 3 Press MENU to exit the menu screen.

To reset the Clock or Timers

- ☐ Press RESET on the remote control after selecting that option in the Timer menu.

Selecting Timer Options





The Timer menu includes the following options:

| Option | Description | |
|--------------------|-----------------------|---|
| Timer 1 Timer 2 | Program | Select to set the Timer by day, time, duration, and channel. |
| | OFF | Select to turn off the Timer. (Your previous settings will be saved.) |
| Current Time | Set the current time. | |
| Daylight Saving | ON | Select in the spring to adjust the time during Daylight Saving Time. |
| | OFF | Select in the fall to adjust the time at the end of Daylight Saving Time. |



Using the Setup Menu

To select the Setup Menu

- 1 Press MENU.
- 2 Move the joystick to the Setup icon  and press .
- 3 Use the joystick to scroll through the features.
- 4 Press  to select a feature. That feature's options appear.
- 5 Use the joystick to scroll through the options.
- 6 Press  to select the desired option.
- 7 Press MENU to exit the menu screen.







Selecting Setup Options


The Setup menu includes the following options:

| Option | Description |
|--------------------------------|---|
| Caption Vision | Allows you to select from three closed caption modes (for programs that are broadcast with closed caption). |
| OFF | Turns off Caption Vision. |
| CC1, CC2, CC3, CC4 | Displays a printed version of the dialog or sound effects of a program. (Should be set to CC1 for most programs.) |
| TEXT1, TEXT2, TEXT3, TEXT4 | Displays network/station information presented using either half or the whole screen (if available). For closed captioning, set to CC1. |
| XDS (Extended Data Service) | Displays a network name, program name, program length, and time of the show if the broadcaster offers this service. |

(Continued)

 To use this feature with widescreen DVDs, set your DVD player to 16:9 aspect ratio.

| Option | Description | | | | | | |
|---------------|--|---------------|--|-----------|-----------------------|-----|-------------------------|
| Video Label | <p>Allows you to label the audio/video components you connected to the projection TV so you can identify them when using TV/VIDEO. When in the Setup menu's Video Label feature, use the joystick to highlight an input to label, then press  to select it. Use the joystick to scroll through the labels. Press  to select the component you connected to each of the input jacks on the back of your projection TV. Select "Skip" if you do not have a component connected to a particular set of input jacks.</p> <table><tr><td>VIDEO 1/2/3/4</td><td>VHS, 8mm, Beta, LD, Game, SAT, DVD, Web, Receiver, DTV, Skip</td></tr><tr><td>VIDEO 5/6</td><td>DVD, DTV, HD, Skip</td></tr></table> <p>If you select "Skip", your projection TV skips this connection when you press TV/VIDEO.</p> <p> When you select "Receiver" on Video Label, your projection TV's input is fixed.</p> | VIDEO 1/2/3/4 | VHS, 8mm, Beta, LD, Game, SAT, DVD, Web, Receiver, DTV, Skip | VIDEO 5/6 | DVD, DTV, HD, Skip | | |
| VIDEO 1/2/3/4 | VHS, 8mm, Beta, LD, Game, SAT, DVD, Web, Receiver, DTV, Skip | | | | | | |
| VIDEO 5/6 | DVD, DTV, HD, Skip | | | | | | |
| Language | Select to display all on-screen menus in your language of choice: English, Español, Français. | | | | | | |
| 16:9 Enhanced | <p>Provides enhanced picture resolution for widescreen sources, such as selected DVD titles (only available when the projection TV is in VIDEO mode). Press TV/VIDEO and select from one of the following options:</p> <table><tr><td>AUTO</td><td>To activate automatically when a 16:9 signal is received.</td></tr><tr><td>ON</td><td>To activate manually.</td></tr><tr><td>OFF</td><td>To deactivate manually.</td></tr></table> | AUTO | To activate automatically when a 16:9 signal is received. | ON | To activate manually. | OFF | To deactivate manually. |
| AUTO | To activate automatically when a 16:9 signal is received. | | | | | | |
| ON | To activate manually. | | | | | | |
| OFF | To deactivate manually. | | | | | | |

 AUTO/ON will appear when projection TV is in video mode 1-6. ON/OFF will appear when projection TV is in VIDEO mode 5-6 and the 480p signal occurs.

Other Information

Programming the Remote Control

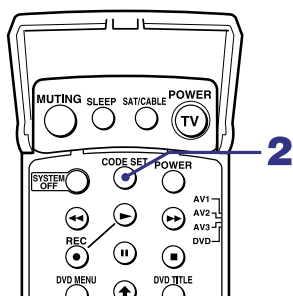
The remote control is preset to operate Sony brand video equipment.

| Sony Equipment | Switch Position on Remote Control | Programmable Code Number |
|-----------------------|--|---------------------------------|
| Beta, ED Beta VCRs | AV1 | 303 |
| 8 mm VCR | AV2 | 302 |
| VHS VCR | AV3 | 301 |
| DVD Player | DVD | 751 |

If you have video equipment other than Sony brand that you want to control with the projection TV's remote control, use the following procedures to program the remote control.



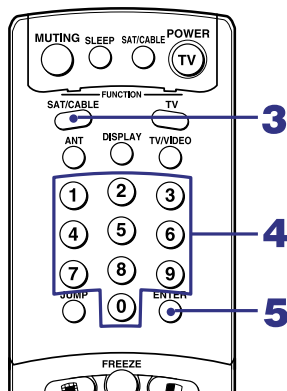
The equipment must have infrared (IR) remote capability in order to be used with the remote control.



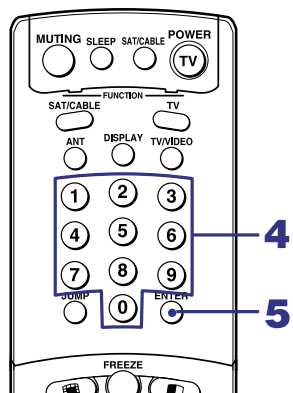
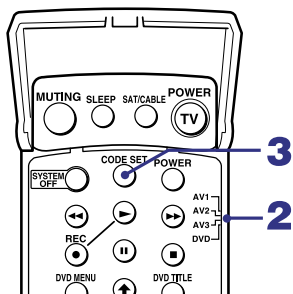
From the "Manufacturer's Codes" listed on page 67, select the three-digit code number for the manufacturer's code for your component. If more than one code number is listed, start with the number listed first. Use the code number to complete the following procedure.

To program a cable box or a satellite receiver

- 1 Open the panel of the remote control.
- 2 Press CODE SET inside the panel.
- 3 Close the panel and press SAT/CABLE (FUNCTION).
- 4 Enter the three-digit manufacturer's code number using the 0-9 buttons.
- 5 Press ENTER.
- 6 To check if the code number works, aim the projection TV's remote control at the component and press the green POWER button that corresponds with that component. If it responds, the programming is completed. If not, try using the other codes listed for that manufacturer.




(Continued)



To program video equipment

- 1 Open the panel of the remote control.
- 2 Move the slide switch to the desired component type.
- 3 Press CODE SET inside the panel.

 You must perform step 4 within 10 seconds of step 3, or you must start again from step 3.
- 4 Close the panel and enter the three-digit manufacturer's code number using the 0-9 buttons.
- 5 Press ENTER.
- 6 To check if the code number works, aim the projection TV's remote control at the component, open the panel, and press the green POWER button. If it responds, the programming is completed. If not, try using the other codes listed for that manufacturer.

Tips

- ☐ If more than one code number is listed, try entering them one by one until you come to the correct code for your component.
- ☐ If you enter a new code number, the code number you previously entered at that setting is erased.
- ☐ In some rare cases, you may not be able to operate your component with the Sony remote control. In this case, use the component's own remote control unit.

Manufacturer's Codes**VCRs**

| Manufacturer | Code |
|----------------------|---|
| Sony | 301 |
| Admiral (M. Ward) | 327 |
| Aiwa | 338, 344 |
| Audio Dynamic | 314, 337 |
| Broksonic | 319, 317 |
| Canon | 309, 308 |
| Citizen | 332 |
| Craig | 302, 332 |
| Criterion | 315 |
| Curtis Mathes | 304, 338, 309 |
| Daewoo | 341, 312, 309 |
| DBX | 314, 336, 337 |
| Dimensia | 304 |
| Emerson | 319, 320, 316, 317, 318, 341 |
| Fisher | 330, 335 |
| Funai | 338 |
| General Electric | 329, 304, 309 |
| Go Video | 322, 339, 340 |
| Goldstar | 332 |
| Hitachi | 306, 304, 305, 338 |
| Instant Replay | 309, 308 |
| JC Penney | 309, 305, 304, 330, 314, 336, 337 |
| JVC | 314, 336, 337, 345, 346, 347 |
| Kenwood | 314, 336, 332, 337 |
| LXI (Sears) | 332, 305, 330, 335, 338 |
| Magnavox | 308, 309, 310 |
| Marantz | 314, 336, 337 |
| Marta | 332 |
| Memorex | 309, 335 |

| Manufacturer | Code |
|-----------------------------|---|
| Minolta | 305, 304 |
| Mitsubishi/ MGA | 323, 324, 325, 326 |
| Multitech | 325, 338, 321 |
| NEC | 314, 336, 337 |
| Olympic | 309, 308 |
| Optimus | 327 |
| Panasonic | 308, 309, 306, 307 |
| Pentax | 305, 304 |
| Philco | 308, 309 |
| Philips | 308, 309, 310 |
| Pioneer | 308 |
| Quasar | 308, 309, 306 |
| RCA/ PROSCAN | 304, 305, 308, 309, 311, 312, 313, 310, 329 |
| Realistic | 309, 330, 328, 335, 324, 338 |
| Sansui | 314 |
| Samsung | 322, 313, 321 |
| Sanyo | 330, 335 |
| Scott | 312, 313, 321, 335, 323, 324, 325, 326 |
| Sharp | 327, 328 |
| Shintom | 315 |
| Signature 2000 (M. Ward) | 338, 327 |
| SV2000 | 338 |
| Sylvania | 308, 309, 338, 310 |
| Symphonic | 338 |
| Tashiro | 332 |
| Tatung | 314, 336, 337 |
| Teac | 314, 336, 338, 337 |
| Technics | 309, 308 |
| Toshiba | 312, 311 |

| Manufacturer | Code |
|---------------------|----------------------------|
| Wards | 327, 328, 335, 331, 332 |
| Yamaha | 314, 330, 336, 337 |
| Zenith | 331 |

DVD Players

| Manufacturer | Code |
|---------------------|-------------|
| Sony | 751 |
| Panasonic | 753 |
| Pioneer | 752 |
| RCA | 755 |
| Toshiba | 754 |

Cable Boxes

| Manufacturer | Code |
|-----------------------|---|
| Hamlin/Regal | 222, 223, 224, 225, 226 |
| Jerrold/G. I. | 201, 202, 203, 204, 205, 206, 207, 208, 218 |
| Oak | 227, 228, 229 |
| Panasonic | 219, 220, 221 |
| Pioneer | 214, 215 |
| Scientific Atlanta | 209, 210, 211 |
| Tocom | 216, 217 |
| Zenith | 212, 213 |

Satellite Receivers

| Manufacturer | Code |
|---------------------|-------------|
| Sony | 801 |
| General Electric | 802 |
| Hitachi | 805 |
| Hughes | 804 |
| Panasonic | 803 |
| RCA/ PROSCAN | 802, 808 |
| Toshiba | 806, 807 |

Operating Other Components with Your Projection TV Remote Control

Operating a VCR

Open the panel and move the slide switch to the AV input you coded for this device.

| <i>To Do This ...</i> | <i>Press</i> |
|--|--|
| Turn on/off | green POWER button (inside the panel) |
| Change channels | CH +/- |
| Record | ▶ and REC simultaneously |
| Play | ▶ |
| Stop | ■ |
| Fast forward | ▶▶ |
| Rewind the tape | ◀◀ |
| Pause | (press again to resume normal playback) |
| Search the picture forward or backward | ▶▶ or ◀◀ during playback (release to resume normal playback) |
| Change input mode | Slide switch |

Operating a DVD Player


Open the panel and move the slide switch to the DVD input you coded for this device.

| <i>To Do This ...</i> | <i>Press</i> |
|---|---|
| Turn on/off | green POWER button (inside the panel) |
| Play | ▶ |
| Stop | ■ |
| Pause | (press again to resume normal playback) |
| Step through different tracks of an audio disc | ▶▶ to step forward or ◀◀ to step backward |
| Step through different chapters of a video disc | CH+ to step forward or CH- to step backward |
| Display the DVD menu | DVD MENU |
| Select tracks directly | 0-9 buttons |
| Display the menu (Setup) | MENU |
| Display the DVD title | DVD TITLE |
| Operate the DVD menu | ↑, ↓, ←, →, ENTER |

Operating a Cable Box

| <i>To Do This ...</i> | <i>Press</i> |
|--------------------------|----------------------|
| Turn on/off | SAT/CABLE (POWER) |
| Select Cable Box | SAT/CABLE (FUNCTION) |
| Select a channel | 0-9 buttons, ENTER |
| Change channels | CH +/- |
| Back to previous channel | JUMP |

Operating a Satellite Receiver

| <i>To Do This ...</i> | <i>Press</i> |
|---------------------------|---|
| Turn on/off | SAT/CABLE (POWER) |
| Select Satellite Receiver | SAT/CABLE (FUNCTION) |
| Select a channel | 0-9 buttons, ENTER |
| Change channels | CH +/- |
| Back to previous channel | JUMP |
| Display channel number | DISPLAY |
| Display DBS guide | GUIDE |
| Display DBS menu | MENU |
| Move highlight (cursor) | Joystick or arrows |
| Select item |  |

Troubleshooting

If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Customer Information Services Center at 1-800-222-SONY (7669) (U.S. residents only) or (416) 499-SONY (7669) (Canadian residents only).

| Problem | Possible Remedies |
|--|---|
| No picture (screen not lit), no sound | <ul style="list-style-type: none">❑ Make sure the projection TV's power cord is connected securely to the wall outlet.❑ Push the power button on the front of the projection TV.❑ Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching connected equipment, set to VIDEO 1, 2, 3, 4, 5 or 6.❑ Try another channel. It could be station trouble.❑ The Parental Control feature is activated. (see "Using the Parent Menu" on page 54)❑ If your projection TV does not turn on, and a red light keeps flashing, your projection TV may need service. Call your local Sony Service Center. |
| Remote control does not operate | <ul style="list-style-type: none">❑ Batteries could be weak. Replace the batteries.❑ Press TV (FUNCTION) when operating your projection TV.❑ Make sure the projection TV's power cord is connected securely to the wall outlet.❑ Locate the projection TV at least 3-4 feet away from fluorescent lights.❑ Check the orientation of the batteries. |
| Dark, poor or no picture (screen lit), good sound | <ul style="list-style-type: none">❑ Adjust the Picture setting in the Video menu. (see page 48)❑ Adjust the Brightness setting in the Video menu. (see page 48)❑ Check antenna/cable connections.❑ Adjust the convergence again using FLASH FOCUS. (see "Adjusting the Convergence Automatically – FLASH FOCUS™ –" on page 33) |
| Good picture, no sound | <ul style="list-style-type: none">❑ Press MUTING so that "MUTING" disappears from the screen. (see page 34)❑ Make sure Speaker is set to ON in the Audio menu. (see page 51)❑ Check the MTS setting in the Audio menu. (see "MTS" on page 50) |
| Cannot receive digital channels (when a DTV receiver is connected) | <ul style="list-style-type: none">❑ Check the connections between the DTV receiver and the projection TV. (see page 28)❑ Check your local listings to find out if you can receive digital broadcasts in your area. |
| Cannot receive upper channels (UHF) when using an antenna | <ul style="list-style-type: none">❑ Change Cable to OFF. (see page 52)❑ Use Auto Program in the Channel menu to add receivable channels that are not presently in TV memory. (see page 53) |
| No color | <ul style="list-style-type: none">❑ Adjust the Color settings in the Video menu. (see page 48) |
| Only snow and noise appear on the screen | <ul style="list-style-type: none">❑ Check the Cable setting in the Channel menu. (see "Cable" on page 52)❑ Check the antenna/cable connections.❑ Make sure the channel is broadcasting programs.❑ Press ANT to change the input mode. (see page 37) |
| Dotted lines or stripes | <ul style="list-style-type: none">❑ Adjust the antenna.❑ Move the projection TV away from noise sources such as cars, neon signs, or hair-dryers. |

| Problem | Possible Remedies |
|---|---|
| Projection TV is fixed to one channel | <ul style="list-style-type: none"> <input type="checkbox"/> Use Auto Program in the Channel menu to add receivable channels that are not presently in TV memory. (see page 53) <input type="checkbox"/> Check your Channel Fix settings. (see page 53) |
| Double images or ghosts | <ul style="list-style-type: none"> <input type="checkbox"/> Use a highly directional outdoor antenna or a cable (when the problem is caused by reflections from nearby mountains or tall buildings). |
| Cannot operate menu | <ul style="list-style-type: none"> <input type="checkbox"/> If the item you want to choose appears in gray, you cannot select it. <input type="checkbox"/> Turn the projection TV's power off and on again. |
| Cannot receive any channels when using cable TV | <ul style="list-style-type: none"> <input type="checkbox"/> Use Auto Program in the Channel menu to add receivable channels that are not presently in TV memory. (see page 53) <input type="checkbox"/> Check your cable settings. <input type="checkbox"/> Make sure Cable is set to ON in the Channel menu. (see page 52) |
| Cannot gain enough volume when using a cable box | <ul style="list-style-type: none"> <input type="checkbox"/> Increase the volume of the cable box using the cable box's remote control. Then press TV (FUNCTION) and adjust the projection TV's volume. |
| Channel Index does not display all available channels | <ul style="list-style-type: none"> <input type="checkbox"/> Make sure Cable is set to ON in the Channel menu. (see "Cable" on page 52) <input type="checkbox"/> Use Auto Program in the Channel menu to add receivable TV channels that are not presently in TV memory. (see page 53) |
| Cannot receive channels Unable to select a channel | <ul style="list-style-type: none"> <input type="checkbox"/> Use Auto Program in the Channel menu to add receivable TV channels that are not presently in TV memory. (see page 53) |
| Lost password | <ul style="list-style-type: none"> <input type="checkbox"/> In the password screen (see page 54), enter the following master password: 4357. The master password clears your previous password; it cannot be used to temporarily unblock channels. |
| Cannot change channels with the remote control | <ul style="list-style-type: none"> <input type="checkbox"/> Be sure you have not inadvertently switched your projection TV from channel 3 or 4 setting if you are using another device to change channels. <input type="checkbox"/> If you are using another device to control channels, be sure the "function" button for that device has been pressed, or the slide switch is set correctly. For example, if you are using your cable to control channels, be sure to press SAT/CABLE. |
| Cannot cycle through the other video equipment connected to the projection TV | <ul style="list-style-type: none"> <input type="checkbox"/> Be sure the Video Label feature has not been set to Skip. (see page 64) |
| There is a black box on the screen | <ul style="list-style-type: none"> <input type="checkbox"/> You have selected a text option in the Setup menu and no text is available. (see page 63 to reset Setup selections) To turn this feature off, select OFF in the Caption Vision option. If you were trying to get closed captioning, select CC1 instead of Text 1-4. |
| There is no twin picture or it is just static | <ul style="list-style-type: none"> <input type="checkbox"/> Be sure your twin picture is set to a video source/channel that has a program airing. <input type="checkbox"/> You may be tuned to a video input with nothing connected to it. Try cycling through your video inputs using TV/VIDEO. <input type="checkbox"/> Twin View is not set to receive a signal from the AUX input. If you have connected a VCR, DVD player or satellite receiver to the AUX input on the projection TV, it will not show in the second picture. |

(Continued)

Other Information

| Problem | Possible Remedies |
|---|--|
| I get the same program in the window picture as in the main picture | <ul style="list-style-type: none">❑ Both may be set to the same channel. Try changing channels in either the main picture or the window picture.❑ You may be running all your channels through a cable box. The cable box will only unscramble one signal at a time, so you cannot use the Twin View feature. If possible, run a direct cable to your projection TV's VHF/UHF input. (This will only work if your cable system provides an unscrambled signal.) |
| I cannot get anything but TV channels in my second picture | <ul style="list-style-type: none">❑ Be sure the video label has not been set to skip your video inputs. See the Setup menu on page 63. |
| Favorite Channel does not display your choices | <ul style="list-style-type: none">❑ Verify that Favorite Channel is set to Manual in the Channel menu. (see "Favorite Channel" on page 52) |
| Some video sources do not appear when you press TV/VIDEO | <ul style="list-style-type: none">❑ Ensure that Video Label is not set to SKIP. (see "Video Label" on page 64) |

Specifications

| | | |
|-----------------------------------|--|--|
| Projection system | 3 picture tubes, 3 lenses, horizontal in-line system | |
| Picture Tube | 7-inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system | |
| Projection lenses | High performance, large diameter hybrid lens F1.1 | |
| Antenna | 75 ohm external terminal for VHF/UHF | |
| Television System | NTSC, American TV Standard | |
| Screen size (measured diagonally) | 43 inches (KP-43HT20) 53 inches (KP-53HS20, KP-53HS30) 61 inches (KP-61HS20, KP-61HS30) | |
| Channel Coverage | | |
| VHF | 2-13 | |
| UHF | 14-69 | |
| CATV | 1-125 | |
| Power Requirements | 120V, 60 Hz | |
| Number of Inputs/Outputs | | |
| Video (IN) | 4 | 1 Vp-p, 75 ohms unbalanced, sync negative |
| S Video (IN) | 3 | Y: 1 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75 ohms |
| Audio (IN) | 6 | 500 mVrms (100% modulation) Impedance: 47 kilohms |
| AUDIO (VAR/FIX) OUT | 1 | 500 mVrms (100 % modulation), Impedance: 470 ohms |
| TV Out | 1 | 1 Vp-p, 75 ohms unbalanced, sync negative |
| CONTROL S (IN/OUT) | 1 | minijacks |
| Component Video Input | 2 (Y, P _B , P _R) | Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative P _B : 0.7 Vp-p, 75 ohms P _R : 0.7 Vp-p, 75 ohms |
| RF Inputs | 2 | |
| Converter | 1 | |

(Continued)

Other Information

| | |
|------------------------|--|
| Supplied Accessories | |
| Remote Control | RM-Y908 |
| AA (R6) Batteries | 2 supplied for remote control |
| Optional Accessories | |
| AV Cable | VMC-810/820/830 HG |
| Audio Cable | RKC-515HG |
| Control S Cable | RK-G69HG |
| Component Video Cable | VMC-10/30 HG |
| AV receiver | STR-V555ES |
| TV Stand | SU-43HT4/43HT5 |
| Speaker Output | 20 W × 2 (KP-43HT20, KP-53HS30, KP-61HS30) 18 W × 2 (KP-53HS20, KP-61HS20) |
| Dimensions (W × H × D) | 38 × 42 1/8 × 22 4/3 inches (965 × 1,069 × 577 mm) (KP-43HT20) 46 1/2 × 55 7/8 × 25 inches (1,180 × 1,417 × 632 mm) (KP-53HS20, KP-53HS30) 54 × 61 1/2 × 26 1/4 inches (1,370 × 1,560 × 666 mm) (KP-61HS20, KP-61HS30) |
| Mass | 119 lb 8 oz (54.2 kg) (KP-43HT20) 152 lb 9 oz (69.2 kg) (KP-53HS20) 157 lb (71.2 kg) (KP-53HS30) 203 lb 11 oz (92.4 kg) (KP-61HS20) 210 lb 5 oz (95.4 kg) (KP-61HS30) |
| Power Consumption | |
| In Use | 230 W |
| In Standby | Under 1 W |

Design and specifications are subject to change without notice.

Index

16:9 (widescreen) **8, 64**

A

Activating a Twin View screen **41**
Adding channels to the channel list **53**
Adjusting audio, Steady Sound **50**
ANT button **34**
Antenna, connecting
Aspect ratio, 16:9 in Twin View **42**
Audio menu **47, 50**
Audio receiver, connecting **25**
Audio/Video cable **12**
Auto Program (channel setup) **32, 53**
Auto Setup **32, 53**
AV receiver, connecting to TV OUT **15**

B

Balance, adjusting **50**
Bass, adjusting **50**
Batteries, inserting in remote **10**
Bilingual audio **50**
Blocking programs. See Ratings.
Brightness, adjusting **48**

C

Cable
 setting ON/OFF **52**
 with VCR, connecting **19**
Cable box
 connecting with VCR **20**
 using with TV remote control **69**
Camcorder, connecting **29**
Caption Vision **63**
CATV. See cable.
Channel Index
 described **9**
 using **45**
Channel list, adding channels **53**
Channel menu **47, 52**
Channel Skip/Add **53**
Channels
 Auto Program **53**
 creating labels **53**
 setting up **32**

CineMotion, DRC **35, 49**
Closed caption modes **63**
CODE SET button **36**
Color temperature, adjusting **48**
Color, adjusting **48**
Connecting
 Audio receiver **25**
 AV receiver **30**
 Cable box **17, 18, 20**
 Cable or antenna **16**
 Camcorder **29**
 Digital TV Receiver **28**
 DVD player **26, 27**
 Satellite receiver **23, 24**
 VCR **20–22, 24**
Connector Types **12**
Contents of box **10**
CONTROL S **31**
Convergence, adjusting automatically **33**

D

Daylight saving **62**
Digital Reality Creation **49**
Digital TV
 connecting **28**
 watching **39**
Digital TV program **39**
Digital TV receiver, connecting **28**
DISPLAY button **34**
Display, turning off **34**
DRC (Digital Reality Creation) Mode, described **8**
DRCCINEMOTION button **35**
DVD MENU button **36**
DVD player
 using with TV remote control **68**
 with A/V connectors, connecting **27**
 with component video connectors, connecting **26**
DVD TITLE button **36**

E

Enhanced picture resolution, 16:9 **64**
Enlarging pictures, in Twin View **43**
Extended Data Service **63**

(Continued)

F

Favorite Channel

- auto **52**
- described **8**
- manual **52**
- setting up **52**
- using **40**

FAVORITES button **34**

Features **8**

Flash Focus

- described **9**
- performing **33**

FREEZE button **34**

Freeze, using **37, 44**

Front Panel Controls **13**

FUNCTION buttons (WHITE) **35**

H

Hookups **16**

Hue, adjusting **48**

I

Inputs, labeling **64**

Installation of the projection TV **16–31**

J

JUMP button **34**

Jump, using **37**

L

Label

- channels **53**
- video inputs **64**

Locking programs **54**

M

MENU button **35**

Menus

- Audio **47, 50**
- Channel **47, 52**
- Parent **47**
- Setup **47, 63**
- Timer **47, 62**
- Video **47, 48**

MODE

- Movie **38**
- Pro **38**
- Standard **38**
- Vivid **38**

MTS/SAP button **36**

MTS/SAP, using **38**

Muting, using **37**

P

Parent menu **47, 54**

Parental control, described **8**

Password, changing **56**

PIC MODE button **34**

Picture contrast, adjusting **48**

Picture size, adjusting in Twin View **43**

POWER button **36**

POWER buttons (GREEN) **35**

Presetting channels **32**

Problems, troubleshooting **70**

R

Ratings

- setting **54–56**
- viewing blocked programs **56**

Rear panel controls and connections **14, 15**

Remote control

- buttons inside panel **36**
- Function of buttons **37**
- inserting batteries **10**
- programming **65–67**

Remote control, operating other components with

- Cable box **69**
- DVD player **68**
- Satellite receiver **69**
- VCR **68**

Removing channels from the channel list **53**

RESET button **34**

Resetting

- Audio options **50**
- Timer options **62**
- Video options **48**

S

S Video cable **12**

SAT/CABLE function button **35**

SAT/CABLE power button **35**

Satellite receiver

- connecting **23**
- using with TV remote control **69**

Setting up channels **32**

Setup menu **47, 63**

Sharpness, adjusting **48**

SLEEP button **34**

Sleep, using **38**
Specifications **73–74**
Steady Sound
 adjusting **50**
 described **8**
Surround sound **50**
SYSTEM OFF button **36**

T

Tape-to-tape editing **22**
Time
 set current **62**
 set daylight saving **62**
Timer menu **47, 62**
Timer setting **62**
Treble, adjusting **50**
Troubleshooting **70**
TV function button **35**
TV power button **35**
TV/VIDEO button **35**
Twin View™
 activating a picture **41**
 described **8**
 using **41**

V

VCR
 connecting two, for tape editing **22**
 using with TV remote control **68**
 with cable box, connecting **20**
 with cable, connecting **19**
 with satellite receiver, connecting **24**
Video inputs, labeling **64**
Video menu **47, 48**
Video Modes, selecting **48**
Viewing area, recommended **11**
VOL +/- button **34**
VOL +/- buttons **37**

W

Widescreen **64**
Widescreen, described **8**

Z

Zoom feature, with Twin View **43**

<http://www.world.sony.com/>

Printed in U.S.A.

If, after reading this instruction manual, you have additional questions related to the use of your Sony projection TV, please call one of the following numbers (English only).

Customers in the continental United States contact the Direct Response Center at:

1-800-222-SONY (7669)

Customers in Canada contact the Customer Relations Center at:

(416) 499-SONY (7669)

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

RA-6 CHASSIS

| <u>MODEL NAME</u> | <u>REMOTE COMMANDER</u> | <u>DESTINATION</u> | <u>CHASSIS NO.</u> |
|-------------------|-------------------------|--------------------|--------------------|
| KP-43HT20 | RM-Y908 | US | SCC-P65C-A |
| KP-43HT20 | RM-Y908 | CAN | SCC-P65C-A |
| KP-53HS20 | RM-Y908 | US | SCC-P65D-A |
| KP-53HS20 | RM-Y908 | CAN | SCC-P65D-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | CAN | SCC-P65A-A |
| KP-61HS20 | RM-Y908 | US | SCC-P65E-A |
| KP-61HS20 | RM-Y908 | CAN | SCC-P65E-A |
| KP-61HS30 | RM-Y908 | US | SCC-P65B-A |
| KP-61HS30 | RM-Y908 | CAN | SCC-P65B-A |

ORIGINAL MANUAL ISSUE DATE: 7/2001

ALL REVISIONS AND UPDATES TO THE ORIGINAL MANUAL PRIOR TO 9/2004 ARE APPENDED TO THE END OF THE PDF FILE.

REVISIONS AND UPDATES AFTER 9/2004 ARE IDENTIFIED WITH 

| <u>REVISION DATE</u> | <u>REVISION TYPE</u> | <u>SUBJECT</u> |
|----------------------|---|---|
| 7/2001 | No revisions or updates are applicable at this time. | |
| 3/2002 | Correction - 1 | IC702, IC703 P/N's corrected on A Board in Electrical Parts List |
| 10/2002 | Supplement - 1(Expired) | Data added for KP-53HS30 models with S/N's 90000001 and up |
| 10/2002 | Correction - 2 | Add L5010, L5011 to Parts List and G Board Schematic |
| 7/2003 | Correction - 3 | Electrical Parts List - P/N Correction/Addition on G Board |
| 10/2003 | Supplement - 2 | Correction to Supplement - 1. This is being corrected to show current CRT P/N's only. The rest of the information did not change. |
| 10/2004 | Removed Note from section 3-11-1. Setup For Adjustment. Note is intended for use by the factory during production, and should not be performed by service technicians (Replaced Pg. 25 with Pg. 25) | |
| 5/2005 | Added Caution statement (Replaced Pg. 3 with Pg. 3) | |
| | IC8004 P/N corrected on D Board in Electrical Parts List (Replaced Pg. 124 with Pg. 124) | |

COLOR REAR VIDEO PROJECTOR

SONY®

SERVICE MANUAL

RA-6 CHASSIS

| <u>MODEL NAME</u> | <u>REMOTE COMMANDER</u> | <u>DESTINATION</u> | <u>CHASSIS NO.</u> |
|-------------------|-------------------------|--------------------|--------------------|
| KP-43HT20 | RM-Y908 | US | SCC-P65C-A |
| KP-43HT20 | RM-Y908 | CAN | SCC-P65C-A |
| KP-53HS20 | RM-Y908 | US | SCC-P65D-A |
| KP-53HS20 | RM-Y908 | CAN | SCC-P65D-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | CAN | SCC-P65A-A |
| KP-61HS20 | RM-Y908 | US | SCC-P65E-A |
| KP-61HS20 | RM-Y908 | CAN | SCC-P65E-A |
| KP-61HS30 | RM-Y908 | US | SCC-P65B-A |
| KP-61HS30 | RM-Y908 | CAN | SCC-P65B-A |

CORRECTION - 1

SUBJECT: A BOARD IC702, IC703 P/N CORRECTION



Correct the service manual as shown.
File this Correction with the service manual.

 : Corrected Item

Section 8: Electrical Parts List (Page 115)

INCORRECT

CORRECT



| REF. NO. | PART NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|----------|--------------|-----------------|---|--------------|-------------------|
| IC702 | 8-759-675-72 | IC M24C08-WMN6T |  IC702 | 8-759-575-71 | IC M24C04-WMN6T |
| IC703 | 8-759-675-72 | IC M24C08-WMN6T |  IC703 | 8-759-675-64 | IC M24C08-MN6T(A) |

COLOR REAR VIDEO PROJECTOR

SONY®

SERVICE MANUAL

RA-6 CHASSIS

| <u>MODEL NAME</u> | <u>REMOTE COMMANDER</u> | <u>DESTINATION</u> | <u>CHASSIS NO.</u> |
|--|-------------------------|--------------------|---------------------------------|
| KP-43HT20 | RM-Y908 | US | SCC-P65C-A |
| KP-43HT20 | RM-Y908 | CAN | SCC-P65C-A |
| KP-53HS20 | RM-Y908 | US | SCC-P65D-A |
| KP-53HS20 | RM-Y908 | CAN | SCC-P65D-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | CAN | SCC-P65A-A |
|  KP-53HS30 | RM-Y908 | US | SCC-P65M-A (S/N 9000001 and up) |
|  KP-53HS30 | RM-Y908 | CAN | SCC-P65M-A (S/N 9000001 and up) |
| KP-61HS20 | RM-Y908 | US | SCC-P65E-A |
| KP-61HS20 | RM-Y908 | CAN | SCC-P65E-A |
| KP-61HS30 | RM-Y908 | US | SCC-P65B-A |

SUPPLEMENT - 1

SUBJECT: THIS SUPPLEMENT IS FOR KP-53HS30
MODELS WITH S/N'S 90000001 AND UP.

Correct the service manual as shown.

File this Supplement with the service manual.

 :Added Item (for KP-53HS30 S/N's 90000001 and up)

Section 6: DIAGRAMS (Page 63)

6-3. SCHEMATIC DIAGRAMS - D (2/3) BOARD CIRCUIT

Section 7: EXPLODED VIEWS (Page 95, 96)

7-4. CHASSIS

7-5. PICTURE TUBE

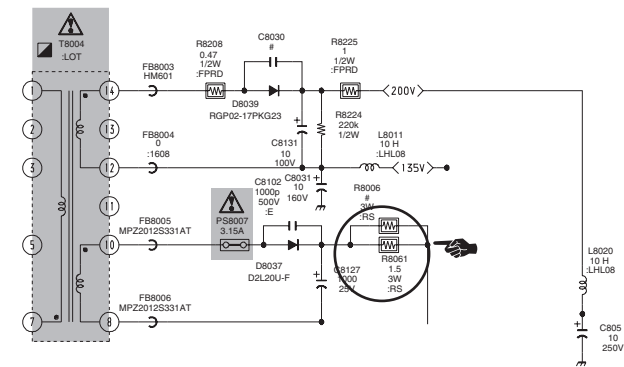
Section 8: ELECTRICAL PARTS LIST (Page 122, 125, 130)

COLOR REAR VIDEO PROJECTOR

SONY®

 : Added Item


SECTION 6: DIAGRAMS (Page 63) (for KP-53HS30 S/N's 90000001 and up)
6-3. SCHEMATIC DIAGRAMS - D (2/3) BOARD CIRCUIT











SECTION 7: EXPLODED VIEWS (Page 95, 96) (for KP-53HS30 S/N's 90000001 and up)




7-4: CHASSIS (Page 95) 7-5: PICTURE TUBE (Page 96)

| REF. NO. | PART NO. | DESCRIPTION |
|---|--------------|---------------|
|  164 | A-1404-674-A | D MOUNT (VAR) |


| REF. NO. | PART NO. | DESCRIPTION |
|---|--------------|----------------------|
|   205 | 1-451-537-22 | DEFLECTION YOKE |
|   207 | 8-733-597-15 | CRT 07MVC3(R)-L(LF) |
|   209 | 8-733-662-15 | CRT 07MVC2(G)-L(LF) |
|   210 | 8-733-596-25 | CRT 07MVC3(B)-L(LFG) |

SECTION 8: ELECT. PARTS LIST (Page 122, 125, 130) (for KP-53HS30 S/N's 90000001 and up)









(Page 122)

| REF. NO. | PART NO. | DESCRIPTION |
|--|--------------|----------------|
|  A-1404-674-A | A-1404-674-A | D MOUNT, (VAR) |

(Page 125)

| REF. NO. | PART NO. | DESCRIPTION |
|---|--------------|-----------------------|
|  R8061 | 1-216-391-71 | METAL OXIDE 1.5 5% 3W |

(Page 130)

| REF. NO. | PART NO. | DESCRIPTION |
|---|--------------|----------------------|
|   1-451-537-22 | 1-451-537-22 | DEFLECTION YOKE |
|   8-733-597-15 | 8-733-597-15 | CRT 07MVC3(R)-L(LF) |
|   8-733-662-15 | 8-733-662-15 | CRT 07MVC2(G)-L(LF) |
|   8-733-596-25 | 8-733-596-25 | CRT 07MVC3(B)-L(LFG) |

SERVICE MANUAL

RA-6 CHASSIS

| <u>MODEL NAME</u> | <u>REMOTE COMMANDER</u> | <u>DESTINATION</u> | <u>CHASSIS NO.</u> |
|-------------------|-------------------------|--------------------|---------------------------------|
| KP-43HT20 | RM-Y908 | US | SCC-P65C-A |
| KP-43HT20 | RM-Y908 | CAN | SCC-P65C-A |
| KP-53HS20 | RM-Y908 | US | SCC-P65D-A |
| KP-53HS20 | RM-Y908 | CAN | SCC-P65D-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | CAN | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65M-A (S/N 9000001 and up) |
| KP-53HS30 | RM-Y908 | CND | SCC-P65M-A (S/N 9000001 and up) |
| KP-61HS20 | RM-Y908 | US | SCC-P65E-A |
| KP-61HS20 | RM-Y908 | CAN | SCC-P65E-A |
| KP-61HS30 | RM-Y908 | US | SCC-P65B-A |

CORRECTION - 2

SUBJECT: ADD L5010, L5011 TO PARTS LIST
AND G BOARD SCHEMATIC.

Correct the service manual as shown.
File this Correction with the service manual.

 :Corrected Item

Section 6: DIAGRAMS LIST (Page 66)

6-3. SCHEMATIC DIAGRAMS - G (2/2) BOARD CIRCUIT

Section 8: ELECTRICAL PARTS LIST (Page 128)

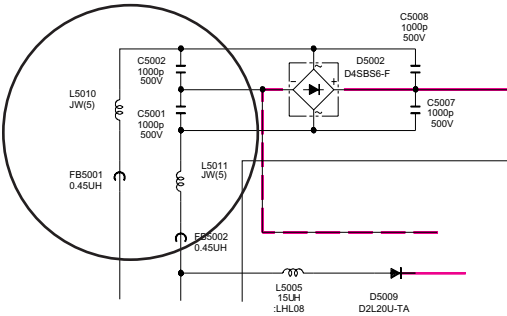
COLOR REAR VIDEO PROJECTOR

SONY®

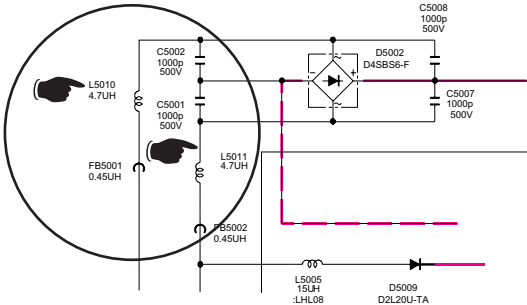
 : Corrected Item

SECTION 6: DIAGRAMS (Page 66)
6-3. SCHEMATIC DIAGRAMS - G (2/2) BOARD CIRCUIT

INCORRECT



CORRECT





SECTION 8: ELECT. PARTS LIST (Page 66)

INCORRECT

| REF. NO. | PART NO. | DESCRIPTION |
|----------|-------------------|-------------|
| -----> | NEEDS TO BE ADDED | |
| -----> | NEEDS TO BE ADDED | |

CORRECT

| REF. NO. | PART NO. | DESCRIPTION |
|---|--------------|----------------|
|  L5010 | 1-412-521-31 | INDUCTOR 4.7UH |
|  L5011 | 1-412-521-31 | INDUCTOR 4.7UH |



SERVICE MANUAL

RA-6 CHASSIS

| <u>MODEL NAME</u> | <u>REMOTE COMMANDER</u> | <u>DESTINATION</u> | <u>CHASSIS NO.</u> |
|-------------------|-------------------------|--------------------|---------------------------------|
| KP-43HT20 | RM-Y908 | US | SCC-P65C-A |
| KP-43HT20 | RM-Y908 | CAN | SCC-P65C-A |
| KP-53HS20 | RM-Y908 | US | SCC-P65D-A |
| KP-53HS20 | RM-Y908 | CAN | SCC-P65D-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | CAN | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65M-A (S/N 9000001 and up) |
| KP-53HS30 | RM-Y908 | CND | SCC-P65M-A (S/N 9000001 and up) |
| KP-61HS20 | RM-Y908 | US | SCC-P65E-A |
| KP-61HS20 | RM-Y908 | CAN | SCC-P65E-A |
| KP-61HS30 | RM-Y908 | US | SCC-P65B-A |

CORRECTION - 3

SUBJECT: ELECTRICAL PARTS LIST
P/N CORRECTION/ADDITION ON G BOARD

Correct the service manual as shown.
File this Correction with the service manual.

:Corrected Item

Section 8: Electrical Parts List (Page 97)
G Board (Pages 126-129)

INCORRECT

IC5006 8-759-504-46 PQ05RF-1
Needs to be Added ----->
Needs to be Added ----->

CORRECT

IC5006 8-759-069-28 PQ05RF-11
 D5027 8-719-069-54 UDZSTE-175.1B
 R5048 1-216-833-11 METALCHIP 10K 5% 1/10W

COLOR REAR VIDEO PROJECTOR


SONY®

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

English
2003GJ7WEB-1
Printed in USA
© 2003.7

SERVICE MANUAL

RA-6 CHASSIS

| <u>MODEL NAME</u> | <u>REMOTE COMMANDER</u> | <u>DESTINATION</u> | <u>CHASSIS NO.</u> |
|--|-------------------------|--------------------|---------------------------------|
| KP-43HT20 | RM-Y908 | US | SCC-P65C-A |
| KP-43HT20 | RM-Y908 | CAN | SCC-P65C-A |
| KP-53HS20 | RM-Y908 | US | SCC-P65D-A |
| KP-53HS20 | RM-Y908 | CAN | SCC-P65D-A |
| KP-53HS30 | RM-Y908 | US | SCC-P65A-A |
| KP-53HS30 | RM-Y908 | CAN | SCC-P65A-A |
|  KP-53HS30 | RM-Y908 | US | SCC-P65M-A (S/N 9000001 and up) |
|  KP-53HS30 | RM-Y908 | CND | SCC-P65M-A (S/N 9000001 and up) |
| KP61HS20 | RM-Y908 | US | SCC-P65E-A |
| KP-61HS20 | RM-Y908 | CAN | SCC-P65E-A |
| KP-61HS30 | RM-Y908 | US | SCC-P65B-A |
| KP-61HS30 | RM-Y908 | CAN | SCC-P65B-A |

SUPPLEMENT - 2

SUBJECT: THIS SUPPLEMENT IS FOR KP-53HS30
MODELS WITH S/N'S 90000001 AND UP.

Correct the service manual as shown.

File this Supplement with the service manual.

 :Added Item (for KP-53HS30 S/N's 90000001 and up)

Section 6: DIAGRAMS (Page 63)

6-3. SCHEMATIC DIAGRAMS - D (2/3) BOARD CIRCUIT

Section 7: EXPLODED VIEWS (Page 95, 96)

7-4. CHASSIS

7-5. PICTURE TUBE

Section 8: ELECTRICAL PARTS LIST (Page 122, 125, 130)

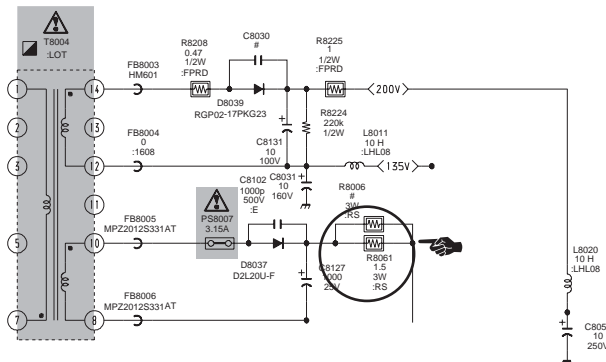
COLOR REAR VIDEO PROJECTOR

SONY®

✎ : Added Item

SECTION 6: DIAGRAMS (Page 63) (for KP-53HS30 S/N's 90000001 and up)

6-3. SCHEMATIC DIAGRAMS - D (2/3) BOARD CIRCUIT



SECTION 7: EXPLODED VIEWS (Page 95, 96) (for KP-53HS30 S/N's 90000001 and up)

7-4: CHASSIS (Page 95)

| REF. NO. | PART NO. | DESCRIPTION |
|----------|--------------|---------------|
| ✎ 164 | A-1404-674-A | D MOUNT (VAR) |

7-5: PICTURE TUBE (Page 96)

| REF. NO. | PART NO. | DESCRIPTION |
|----------|--------------|----------------------|
| ✎ ⚠ 205 | 1-451-537-22 | DEFLECTION YOKE |
| ✎ ⚠ 207 | 8-733-597-25 | CRT 07MVC3(R)-L(LF) |
| ✎ ⚠ 209 | 8-733-662-25 | CRT 07MVC2(G)-L(LF) |
| ✎ ⚠ 210 | 8-733-596-35 | CRT 07MVC3(B)-L(LFG) |

SECTION 8: ELECT. PARTS LIST (Page 122, 125, 130) (for KP-53HS30 S/N's 90000001 and up)

(Page 122)

| REF. NO. | PART NO. | DESCRIPTION |
|----------|--------------|----------------|
| ✎ | A-1404-674-A | D MOUNT, (VAR) |

(Page 125)

| REF. NO. | PART NO. | DESCRIPTION |
|----------|--------------|-----------------------|
| ✎ R8061 | 1-216-391-71 | METAL OXIDE 1.5 5% 3W |

(Page 130)

| REF. NO. | PART NO. | DESCRIPTION |
|----------|--------------|----------------------|
| ✎ ⚠ | 1-451-537-22 | DEFLECTION YOKE |
| ✎ ⚠ | 8-733-597-25 | CRT 07MVC3(R)-L(LF) |
| ✎ ⚠ | 8-733-662-25 | CRT 07MVC2(G)-L(LF) |
| ✎ ⚠ | 8-733-596-35 | CRT 07MVC3(B)-L(LFG) |